



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

David A. Galt, Director
Judy Martz, Governor

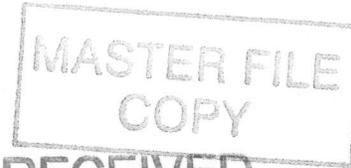
December 18, 2001

Janice Brown, Division Administrator
Federal Highway Administration
2880 Skyway Drive
Helena, MT 59626

RECEIVED

DEC 21 2001

ENVIRONMENTAL



RECEIVED

AUG 19 2009

TRANSPORTATION PLANNING

**Subject: NH 1-1(29) 45 F
Swamp Creek-East
Control No. 1027**

The Montana Department of Transportation (MDT) prepared the Reevaluated Environmental Assessment/Finding of No Significant Impact (REA/FONSI 1994) for the referenced project and has prepared this update to comply with 23 CFR 771.129 and 40 CFR 1500 to 1508. Disclosure of new information or circumstances complies with 23 CFR 771.129(c). This proposed action also continues to qualify as an Environmental Assessment under the provisions of ARM 18.2.237(2) and 18.2.239 (Sections **2-3-104** and **75-1-201, M.C.A.**).

This document has been prepared to request the Federal Highway Administration's (FHWA) concurrence that a supplemental EA for the referenced project will not be necessary for the following reasons:

- There is no change in the scope of work. The US Highway 2 roadway project limits and design have not changed since the previous environmental studies were conducted.
- New information or circumstances relevant to environmental concerns and bearings, which are discussed below, would not result in any significant environmental impacts.

The Federal Highway Administration signed the Reevaluated Environmental Assessment/Finding of No Significant Impact (FONSI/REA) for the Swamp Creek-East project on May 31, 1994. A copy is enclosed. This current analysis describes the environmental studies and technical reports that were prepared to update the *Reevaluated Environmental Assessment and Finding of No Significant Impact* (REA/FONSI 5/31/94). The clearances and permits to be obtained for this project are summarized as well. A copy of each of the following supporting technical documents is attached.

- The Revised Biological Resources Report (WEST Inc., 2001)
- The Swamp Creek-East Channel Change Inventory and Historic Structures Survey of US Highway 2 in Lincoln County, MT (ACRCS, 2000)
- The Final Design Report: Swamp Creek Relocation Project (WCI, 2001)

Proposed Action

The proposed reconstruction will widen the highway to 12 m (40 feet), including two 3.6 m (12-foot) wide travel lanes with 2.4 m (8 foot) shoulders. The proposed alignment will generally follow the existing alignment, however, several adjustments have been proposed to flatten horizontal and vertical curves and to move the roadway away from a group of residences. The project alignment and design features described in the REA/FONSI (1994) remain accurate. The proposed reconstruction includes widening, grading, drainage, surfacing, signing, pavement markings, guardrails, reclamation/revegetation: topsoil and seeding, and utility relocation where necessary. Existing intersections and approaches will be improved for sight distance and mailbox turnouts will be constructed where appropriate. The REA/FONSI (1994) addressed four timber bridges, one of which has been removed. The three remaining timber bridges over Swamp Creek will be replaced with large oversized box culverts to accommodate fish passage and flood flows. The size of the

culverts over Swamp Creek have increased when compared to the former design plans. The bridge over Miller Creek was replaced in 1988 and no further work is planned for that bridge as part of this project. Other existing culverts, including at Schrieber Creek, will be replaced.

The project also includes similar relocations to portions of the Swamp Creek channel as had been previously designed. When coordination for the project permitting began, the previous Swamp Creek channel design was determined to not be "permissible" by the permitting resource agencies due to lack of fish habitat, fish passage ability, and poor sediment transport. Resource agencies also cited specific requirements under the Endangered Species Act related to the federally listed bull trout. Therefore, the primary focus of this environmental update is to address the current relocation and hydrology plans for Swamp Creek. The creek relocation designs are based on Rosgen's natural channel design principles, which incorporate native materials such as trees, rocks, and shrubs for channel stabilization. Natural channel design principles aim to restore Swamp Creek's potential capacity to transport flows and sediment; promote fish passage, create and enhance fish habitat, and be self-maintaining. More specifics of the Swamp Creek channel design are included in Section 4.10.

The Swamp Creek-East project is tentatively scheduled for letting in the spring of 2002. The project is expected to take several construction seasons to complete.

Environmental Issues Evaluated and Reviewed

Based on the current project description for the improvements to US Highway 2 and Swamp Creek and the identified area of potential impact, the following areas of analysis were determined to not have changed from the previous analysis in the REA/FONSI (1994): Irrigation, Noise; Air Quality; Construction, and Energy and Commitment of Resources. Sections that have been added to this update that were not included in the REA/FONSI (1994), based on new NEPA legislation and guidelines are Environmental Justice and Cumulative Effects. Technical analyses (which are incorporated herein by reference) were conducted and impacts assessed for all other applicable environmental considerations. Impacts and mitigation measures described in the REA/FONSI (1994) remain current and applicable, unless stated otherwise. The section numbering corresponds to the REA/FONSI (1994). Appendix A contains the Programmatic Section 4(f) forms and Appendix B contains additional agency correspondence and concurrence letters.

4.1 Social, Environmental Justice, and Economic

Existing Conditions

The existing conditions provided in the REA/FONSI remain accurate. The following additional data has been provided for documentation in establishing a baseline and growth trend.

Population Statistics

	1980	1990	Percent change 1980-1990	2000	Percent change 1990-2000
State of Montana	786,690	799,065	+1.5 %	902,195	+12.9 %
Lincoln County	17,752	17,481	-1.5 %	18,837	+7.7 %
Libby	2,748	2,532	-7.8 %	2,626	+3.7 %

Source: US Dept. of Commerce, US Census Bureau 1980
US Dept. of Commerce, US Census Bureau 1990
US Dept. of Commerce, US Census Bureau 2000

The population statistics identified above indicate that the population and growth conditions in Lincoln County and Town of Libby at the time the REA/FONSI was signed, were on a decline and not tracking at the same pace as the State of Montana as a whole. The population and growth conditions for the Town of Libby for the years since the REA/FONSI was signed have shown a

minor amount of growth, but remain less than Lincoln County or the State of Montana as a whole. The population of Libby for the year 2000 remains less than the population total for 1980. This would support the slight growth in population, but a condition of re-establishing stability, rather than rapid growth and expansion. Local planning officials noted an increase in the retirement community in Libby.

Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, signed by President Clinton on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and/or adverse effects of federal projects on the health or environment of minority and low-income populations, and minority-owned businesses, to the greatest extent practical and permitted by law.

According to 1999 estimates by the U.S. Census Bureau, in Lincoln County there is a total white population of 97.7%. Comparatively, the State of Montana has a white population of 92.5%. The 1995 statistic for people living below the poverty level in Lincoln County is 18.3%, for the State, it is 15.8%. Based on field meetings with landowners, no minority or low-income populations have been identified in the study area that would be adversely affected by the proposed project as specifically required by Executive Order 12898 regarding environmental justice.

Economic

According to the Lincoln County Economic Development Council, Inc., the number of small businesses in the county has been growing in the last decade. Sixteen (16) percent of employed persons in Libby were self-employed in 1990 (US Bureau of the Census), versus thirteen (13) percent for the county during the same period. The following table identifies the employment statistics by industry for Libby and Lincoln County. The data indicates a county level shift in agricultural and mining occupations to construction, transportation/communication/utilities, and finance/insurance/real estate. Manufacturing and retail trade remain the largest occupations in Libby.

Employment Statistics by Industry

	Libby City: 1990	Lincoln County: 1990	Lincoln County: 1998	County-wide Percent change 1990-1998
Agriculture	50	525	233	-55%
Mining	20	221	33	-85%
Construction	59	333	589	+76%
Manufacturing	269	1643	1470	-10%
Transportation, Communication, Utilities	43	214	370	+72%
Wholesale Trade	23	146	106	-37%
Retail Trade	134	1207	1642	+36%
Finance, Insurance, Real Estate	30	148	505	+241%
Business	50	213	NA	NA
Education	82	561	NA	NA
Health Services	62	458	NA	NA
Other	140	831	2154	+159%
Total workforce	984	6500	8962	+37%

Source: US Bureau of the Census,

Based on conversations with adjacent landowners, the existing resident population adjacent to the project corridor has remained fairly stable since the time period when the REA/FONSI was signed. Several properties have changed landowners, but there has not been a noticeable growth in new residential construction within the project corridor. Building permit data obtained from the US Census Bureau for the years 1980 to 1990 identified 85 permits issued for new private housing construction in Lincoln County. For the years 1990-1997, 38 building permits were issued for new private housing construction, indicating reduced new housing construction in the most recent data.

Impacts

The No Action Alternative would not have any social or economic impacts.

Descriptions of the Preferred Alternative impacts identified in the REA/FONSI remain unchanged. Some additional easements will be required to accommodate the new Swamp Creek channel design. This is described in Section 4.6 Right-of-Way in more detail. The Preferred Alternative will improve highway and traffic safety, as well as overall public and resident safety by providing wider shoulders and improved sight distances.

The Preferred Alternative will not affect access to schools, recreation areas, churches, businesses, or fire and police protection. In the area of new highway alignment, a portion of the current US Highway 2 roadway will be maintained for local access to residences near the northern project limits. All other access to US Highway 2 will be unchanged or improved.

The No Action Alternative and the Preferred Alternative do not affect, separate or isolate any distinct neighborhoods, low-income groups, or minority households or businesses. The No Action and the Preferred Alternatives will not create disproportionately high and adverse human health or environmental effects on minority and low-income populations. Therefore, the No Action and Preferred Alternatives would be in compliance with EO 12898 and comply with Title VI of the Civil Rights Act of 1964, 942 (U.S.C. 2000d).

Landowners who will have temporary conservation easements negotiated on their property related to the Swamp Creek construction and vegetation re-establishment, will be compensated for any property acquired for the project.

The project is not expected to result in substantial adverse impact to the economic vitality of Libby, Lincoln County or adjacent small businesses. The above analysis supports the determination that the updated project impacts do not represent a significant impact requiring preparation of an environmental impact statement (EIS).

4.2 Visual

Existing Conditions

Based on conversations with persons familiar with the historical visual character of the project study area, no changes to the current landscape character were identified from the assessment in the REA/FONSI. The Kootenai National Forest Plan identifies two Management Areas (MA 16 and 17) adjacent to the project corridor that are considered sensitive viewsheds or require a higher level of protection for the visual resource.

Impacts

No changes to the visual character of the project corridor will occur with the No Action Alternative.

In addition to the visual impacts described for the Preferred Alternative in the REA/FONSI, the Swamp Creek channel and floodplain will be revegetated with transplanted material from the

current channel and also supplemented with native, nursery-grown stock. The intent of the Swamp Creek design is to re-establish a functioning riparian and wetland corridor within the floodplain. This is considered a visual enhancement to these portions of the Swamp Creek drainage. The positive scenic attributes of a functioning riparian stream corridor are considered to be a positive enhancement to those locations where Swamp Creek will be restored.

US Highway 2 travels through two areas of MA 17 within the project corridor. One area is located between Milepost (MP) 52.4 to 53.3 on the west side of the highway. The proposed improvements to the roadway are generally on the existing centerline. Timber clearing is not restricted in this MA, but the timber harvest and visual resource management are to be coordinated to provide a natural appearing landscape. As stated in the mitigation in Section 4.12 Vegetation, vegetation clearing shall be confined to MDT's defined construction limits (with the one exception where utility corridors extend beyond the construction limits), instead of clearing the entire right-of-way.

Another area of MA 17 along the project is located between MP 46.2 to 46.6, primarily to the west of the road. The proposed roadway is off alignment in this location, further to the west up on the hillside. The Swamp Creek channel will be reconstructed in this location as well. Vegetation removal as part of the creek reconstruction will be minimized to the extent possible. The creek design has been modified in this location to minimize the impact to the existing vegetation. The roadway revegetation and grading efforts will be consistent with mitigation defined elsewhere (Section 4.12 Vegetation and in the REA/FONSI).

Mitigation

As mitigation committed to in the REA/FONSI, the County dumpster relocation is being coordinated with MDT and Lincoln County representatives.

4.3 Land Use

Existing Conditions

Land uses in and adjacent to the project area include logging, grazing, hay production, and home development. Logging occurs on both private and federal lands, primarily on the slopes and higher stream terraces. The federal lands are managed by the Kootenai National Forest. Much of the private, forested land is owned by Plum Creek Timber Company. The valley bottoms are primarily composed of wet or moist meadows used for grazing, hay production, and home development. Because the valley bottoms are quite narrow in the project area, agricultural lands are limited.

Management direction for National Forest lands within the project area is outlined in the Kootenai National Forest Land and Resource Management Plan (Kootenai Forest Plan) 1987, which was the current plan at the time the REA/FONSI was signed. The Forest Plan identifies management areas (MA's) and the management direction for each MA. National Forest System lands to the east of the project are allocated to big game winter range (MA's 10 & 11); those to the west are timber/viewing allocations (MA 16 & 17). Two parcels of designated old growth (MA 13) also occur adjacent to the highway on the east and west sides of the project.

- MA 10: Areas generally below 4500 feet elevation on favorable solar exposures that are important for big game winter range. They are generally difficult to manage for timber because of low productivity or difficult environmental problems.
- MA 11: Same as MA 10, except that productive forestlands are involved which can provide both wildlife and timber benefits.
- MA 13: Small areas generally below 5000 feet elevation providing special habitat needs for old growth timber dependent species. Timber harvest is not permitted.

- MA 16: Productive forest lands that will be managed for high timber yields while protecting watershed, soils, fisheries and the visual resource. Providing a higher level of protection for the visual resource.
- MA 17: Productive Forest lands that are located within sensitive viewsheds. Timber harvest and visual resource management must be coordinated to provide a natural appearing landscape.

Impacts

No land use changes would be associated with the No Action Alternative.

Re-alignment and right-of-way (ROW) clearing associated with the project could potentially result in direct losses of winter range (MA 10 & 11) and old growth habitat (MA 13).

- Some timber loss/clearing will occur between MP 54 to 54.8 in an area designated as MA 11 due to road construction. The Forest Plan does not restrict the harvesting of timber in this designated area.
- One area of old growth forest (MA 13) is located along US Hwy 2 along the east side at MP 47.1 to 47.7. The proposed roadway improvements are proposed on the current alignment and have been minimized and guardrail is proposed to further reduce the typical section. In one area the highway centerline shifts to the west to correct the deficient roadway geometry. This will not cause additional impact to the MA 13 land. There are two areas of Swamp Creek reconstruction within this section (MP 47.3 to 47.6). These locations were proposed for reconstruction in the original creek relocation design. The proposed reconstruction disturbances are expected to be minimal, with as little tree removal as possible.
- The other area of MA 13 adjacent to the project corridor is intermittently located to the west of the highway between MP 50.8 to 51.3. The road alignment is proposed to be shifted east in this area. The proposed right-of-way has been minimized and stays within existing right-of-way line on the west side. Section 4.12 under Vegetation-mitigation refers to measures that will minimize unnecessary vegetation clearing within the right-of-way.

These minor losses will be negligible and would not result in unacceptable or substantial impact. These impacts would not affect meeting the Forest Plan direction or population viability for associated species. (G. Altman-Kootenai National Forest, correspondence, 2001)

The project is proposed to upgrade a national highway system roadway to meet current safety and traffic needs. The project is not intended to increase the highway's capacity to any substantial degree or to induce growth. Since the majority of adjacent land is forested and owned by Plum Creek Timber Company or managed by the Kootenai National Forest, it is unlikely that the project will affect a change in land use for a large portion of the study area. In addition, the terrain of the project area is mountainous throughout much of the area, not lending itself for much development. Therefore, no land use changes or induced growth are anticipated due to the implementation of the Preferred Alternative. The project is not expected to result in a change in land use that is incompatible with surrounding land uses.

Some areas along the relocated Swamp Creek are proposed to be protected with conservation easements to maintain wetland mitigation sites. These areas could not be converted to another land use once developed as wetland mitigation sites.

4.4 Agricultural Lands

Existing Conditions

The project has been coordinated with the US Department of Agriculture Natural Resource Conservation Service (NRCS) regarding prime farmland or farmland of state importance categorization. The NRCS indicated that detailed soil survey information is not available for most of Lincoln County and therefore there would be no lands designated as prime farmland or farmland of state importance. A farmland conversion rating form was therefore, not processed for this update to the REA/FONSI.

In the absence of the determination of prime or statewide important farmland, some assumptions regarding the land in the project corridor can be made based on soil and vegetation data collected during the update of the biological studies. The NRCS representative stated the following conditions would rule out the presence of prime farmland: presence of obligate wetland species, presence of hydric soils indicating wetlands, or lands in excess of 6 percent slopes. As documented in *The Revised Biological Resources Report* (BRR) (WEST, Inc., 2001), much of the valley meadows which are currently grazed or used for hay production, have been delineated as wetlands containing hydric soils and/or obligate wetland species. If lands do not meet the above conditions and are not currently irrigated, they could be classified as farmland of statewide importance. The REA/FONSI (1994) identified no prime or unique farmland in Lincoln County. This project update confirms this determination.

Public concern has been expressed regarding the loss of agricultural lands used for hay production and grazing. Efforts have been made by the project design staff to minimize right-of-way requirements where feasible and in locations where public safety will not be jeopardized. Some right-of-way limits have been reduced to minimize impacts to wetlands and private property. In addition, in at least one instance where the Highway 2 alignment will be in a new location, the existing roadway will be reclaimed and land may be returned to the landowner for hay production.

Impacts

No impacts to agricultural lands would occur with the No Action Alternative.

The total right-of-way acreage estimated for the Preferred Alternative is 83 hectares (204.86 acres). The total ROW acquisition includes approximately 25 hectares (61 acres) of land that is currently grazed or used for hay production. The estimate for land currently grazed or used for hay production was determined by site visits, coordination with landowners regarding current use of property, and aerial photographic documentation. The REA/FONSI (1994) estimated 14.3 hectares (35.3 acres) of grazed or land used for hay production to be acquired with the Preferred Alternative. It was not possible to verify the method used to calculate previous acreages of land that are grazed or used for hay production.

Revised Table 4-3, Hay/Grazing Land Converted to Right-of-Way

From Milepost	To Milepost	Area of Hay/Grazing Land Converted to R/W (acres)	
		1998 REA/FONSI estimate: Alternative P, A, B, & D	2001 Preferred Alternative estimate
44.8	45.5	5.0	15.54*
45.5	46.7	2.7	0.75
48.4	51.2	20.2	28.21
51.5	51.9	0.8	6.78
53.1	54.1	6.6	9.62
Total		35.3 acres	60.9 acres

* Estimate includes land that may be returned to landowner, which would make estimate lower for this section.

The quantity and ownership of land being acquired for the project is divided as follows:

National Forest System Lands	16.2 hectares (40.02 ac.)
Plum Creek Timber Company	30.9 hectares (76.47 ac.)
38 privately owned parcels	35.67 hectares (88.15 ac.)
USA unpatented	0.8 hectare (0.21 ac.)

Based on the original estimate of 165 hectares (410 acres) being available in the valley for hay production and grazing (see page 4-6 of REA/FONSI (1994)). The new estimate of hay and grazing land converted to highway right-of-way from the Preferred Alternative would be 14.6 percent, compared to 6-7 percent identified in the REA/FONSI.

Of the privately-owned parcels where grazing and hay production are the current land uses, four (4) parcels will have a more sinuous Swamp Creek channel than previously designed. While a meandering channel will be constructed on these parcels, and hard bottom or other crossings have been incorporated at locations coordinated with the affected landowners, it will not preclude the use of the property for continued hay production or grazing. The Swamp Creek channel design for the restored or relocated sections will incorporate a riparian vegetation community and functioning floodplain. Several of the creek relocations occur in meadows that are currently wetlands or historical channels of Swamp Creek. The revegetation species identified for these areas are compatible with livestock grazing. In addition, the lands which are currently grazed or used for hay production will not be restricted from this use following construction and a five year re-establishment period, which is being coordinated with landowners as part of a temporary easement. On parcels where a permanent conservation easement is granted, the wetlands will be protected from degradation or alteration by fencing or some other means.

4.6 Right-of-Way

No additional right-of-way would be required for the No Action Alternative.

The amount of right-of-way (ROW) to be acquired for the project is estimated at 83 hectares (204.86 acres). This is 21 hectares (51.96 acres) more than reported in the REA/FONSI. Some of the increase in ROW acreage can be attributed to land that will be purchased for wetland mitigation sites or excess land that MDT plans to purchase as part of landowner negotiations where the landowner has chosen to be "bought out". Other changes in the identified amount of ROW to be acquired are the result of changed MDT standards for calculating ROW and the current design process which identified actual construction limits compared to the estimate identified in the REA/FONSI. The original ROW estimate in the 1994 REA/FONSI was based on conceptual engineering plans, whereas the updated quantity reflects current design estimates. In addition, MDT design criteria has changed for the design of ditch sections since the REA/FONSI was signed. The new standard requires a wider clear zone. Permanent easements will be secured for construction of the Preferred Alternative and for protected wetland mitigation sites.

US Highway 2 is a part of the National Highway System (NHS) and as such must meet NHS standards for minimum widths. The project ROW includes an average 50 m. (160 foot) width: two 3.6 meter (12 foot) lanes, two 2.4 meter (8 foot) shoulders and the area necessary for inslopes, ditch sections and backslopes. Three elements of this project which have strongly influenced the amount of ROW required are the existing adjacent terrain, the shifted alignment to avoid residences, and the relocation and restoration of Swamp Creek. There are many substantial cut and fill slopes that are required to match the steep adjacent slopes. The REA/FONSI included language regarding the option to use retaining walls to minimize ROW impacts. This measure has not been included in the project design.

All lands needed for right-of-way from private ownership on this project will be acquired by MDT in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (1989) (P.L. 91-646), the Uniform Relocation Act Amendments of 1987 (P.L. 100-17), EO 12898, and Title VI of the Civil Rights Act of 1964. Compensation for right-of-way acquisitions is made at "fair market value" for the "highest and best use" of the land.

4.7 Relocations

No relocations would be required with the No Action Alternative.

Revisions to the impacts described in the REA/FONSI include:

- A change in landowner from Champion International Corporation to Plum Creek Timber Co., as the second largest landowner affected by the project.
- The reference to a barn at milepost 53.5 is located to the **right** of US Highway 2.

A rental cabin at milepost 52.25 (metric Sta. 130+40) was purchased by MDT and will be relocated as it is in the right-of-way after an alignment shift was made to minimize impacts to an adjacent landowner. The current landowner retains access, use and ownership of the remaining land. The primary residence was not affected.

The REA/FONSI (1994) identified the barn, garage and residence at milepost 53.5 as relocations. However, these structures are being reevaluated under the right-of-way development process and may not require relocation. Coordination with affected landowners is ongoing by MDT Right-of-Way staff.

No major displacements would result which threaten the stability of a neighborhood or community.

Section 4.1 of the REA/FONSI discussed the relocation of overhead and underground utilities as occurring throughout the project corridor. The utilities are proposed to be relocated from the edge of existing right-of-way to the new edge of right-of-way. All utility relocations and adjustments will be coordinated with the respective utility companies during final design and prior to construction.

Potential impacts resulting from utility relocations could include:

- Additional easements required of landowners.
- Temporary disruption of service, while lines are reconnected.
- Additional tree or vegetation clearing outside of the construction limits.

4.10 Water Resources, Water Quality & Floodplains

Existing Conditions

The project extends from the Libby Creek crossing on the north to the Fisher River crossing on the south. As described in *The Revised Biological Resources Report* (BRR) prepared by WEST, Inc. (WEST, Inc., 2001), Swamp Creek flows through the project valley where it joins Libby Creek. Swamp Creek parallels the highway through much of the project area. A low pass is located in the southern half of the project area, and on the south side of this pass US Highway 2 crosses Schrieber Creek and Miller Creek, tributaries to Fisher River. Cowell Creek is located east of the highway and runs north until it confluences with Swamp Creek. Schrieber Lake is located approximately 100 m (330 feet) west of the existing highway near MP 54. All of the streams and rivers are considered perennial, however Schrieber Creek and some portions of Swamp Creek are intermittent during dry years. Swamp Creek historically was impacted by the construction of Highway 2, along with other factors such as irrigation, rural development, and flood control. Swamp

Creek currently exists in a semi-stable, yet degraded condition. For example, in several locations Swamp Creek is a ditch adjacent to the roadway with no floodplain.

The Final Design Report: Swamp Creek Relocation Project prepared by Water Consulting, Inc. (WCI, 2000) identifies the estimated hydrology and flood flow, as well as background on the study area historic and geomorphic background. This information was used to calculate proposed Swamp Creek channel modifications. The revised Table 4-7 identifies the updated channel reconstruction locations and lengths.

Revised Table 4-7, Lengths of Channel Change

Drainage	(Reach number) Road Stationing	Existing Channel Length (feet)	Proposed Channel Length (feet)	Net Difference Channel Change (feet)
Swamp Creek	(11) Station 14+80 to 18+20	1115	1,312	+ 197 ft
Swamp Creek	(1) Station 18+20 to 20+30	722	1,020	+ 298 ft
Swamp Creek	(2) Station 30+00 to 44+15 ⁽¹⁾	5098	5,915	+817 ft
Blackjack Creek	(10) Station 38+40	100	105	5 ⁽²⁾
Swamp Creek	(3) Station 50+60 to 52+15	492	522	+ 30 ft
Swamp Creek	(4) Station 54+75 to 55+80	430	400	- 30 ft
Swamp Creek/ Cowell Creek	(5) Station 58+00 to 66+00	2,665/1,870	4,065	-470 ft
Swamp Creek	(6) Station 70+30 to 73+70	1,200	2,310	+ 1,110 ft
Swamp Creek	(7) Station 118+40 to 119+00	154	154	0
Reinhart Gulch	(8) Station 119+50 to 121+00	131	528	+ 397 ft
Swamp Creek	(9) Station 120+20 to 122+70	1,180	1,214	+ 34 ft
Schreiber Creek	Station 176+10 to 176+50	131	131	0
Swamp Creek	(12) Station 100+60 to 101+40	314	312	-2 ft.
	Total	15,602 feet	17,988 feet	+2,386 feet

- (1) Channel restoration between Sta. 31+00 to 33+40 and Sta. 34+40 to 37+00 is being performed to maintain a continuous gradient and restored stream system. These segments will not be impacted by the proposed road construction. Wetland mitigation has been incorporated adjacent to the restored stream in this area.
 (2) Improvements to Blackjack Creek are to provide stability. The overall length change is negligible.

Swamp Creek and the other drainages named above are not listed on the state's 303 (d) list. However, Swamp Creek would be considered a potential source of impairment to Libby Creek related to sedimentation. Swamp Creek currently exists in a semi-stable, yet degraded condition.

As mentioned in the REA/FONSI, Swamp Creek's floodplain is regulated by the Federal Emergency Management Agency (FEMA). The proposed design will be in compliance with FHPM 6-7-3-2, "Location and Hydraulic Design of Encroachments on Floodplains" (now referenced as 23 CFR 650A) and Executive Order 11988.

The WCI design report discusses the existing state of the Swamp Creek floodplain. The report states that much of the Swamp Creek channel has been altered by historical changes in land use and development such that much of the existing floodplain is non-existent or unattainable. In many locations, Swamp Creek is located in a straightened ditch alongside US Highway 2.

Impacts

No changes to the water resources, water quality or floodplain would occur with the No Action Alternative.

No changes have been made to the highway reconstruction design plans for the Preferred Alternative since the REA/FONSI (1994); however the proposed channel changes to Swamp Creek have been redesigned to address the concerns expressed by several resource agencies and private entities on the previous creek relocation design. Project construction adjacent to these water resources includes replacing the three existing timber bridges over Swamp Creek with oversized double box culverts to accommodate fish passage and flood flows. The bridge over Miller Creek was replaced in 1988 and no further work is planned for that bridge as part of this project. Other existing culverts, including the culvert at Schrieber Creek, will be replaced.

The previous channel design included channel modifications at six locations and an increase in overall length of the channel by 33.5 m (110 feet). The current design includes modifications to portions of the Swamp Creek channel and an increase in overall length by 727 m (2,386 feet). Reconstruction plans for Swamp Creek are based on natural channel design principles that incorporate native materials such as trees, rocks, and shrubs for channel and bank stabilization. Natural channel design principles aim to restore Swamp Creek's potential capacity to transport flows and sediment; and create and enhance fish habitat. Complete descriptions of modifications are described in *The Final Design Report: Swamp Creek Relocation Project* (WCI, 2000). In general, the modifications involve creating a more sinuous channel and a floodplain so the creek has an area to disperse excess water and sediment during flood events. At one location, Swamp Creek will be restored to its historic channel. In another location, Swamp Creek will be diverted to a modified Cowell Creek channel (an intermittent stream). The modifications also incorporate natural in-stream structures to maintain elevation and create diverse aquatic habitat, and transplanting of existing sod mats and riparian shrubs from donor sites throughout and adjacent to the project area.

The Swamp Creek channel relocation is being designed as a non-consumptive project and no additional water rights are required. Any irrigation ditches affected by the project will be restored.

Mitigation

The mitigation measures identified in the BRR and Design Report will not only protect the water quality and restore fish habitat values to Swamp Creek, but will reduce the potential for negative impacts to Libby Creek. BMPs and other special construction techniques will be utilized and required as part of the environmental permit conditions, to avoid and minimize sedimentation and turbidity during construction of Swamp Creek.

4.11 Wetlands

Existing Conditions

The Revised Biological Resources Report (BRR) (WEST, Inc. 2001) updates information provided in the previous Wetlands Evaluation report (OEA Research) prepared for this project in 1992. Information from this report has been updated and combined into one report per current Montana Department of Transportation (MDT) guidelines. The report includes a wetlands finding report using the 1987 US Army Corps of Engineers wetland delineation methods and MDT's updated Wetland Assessment Method (Berglund 1999).

A total of 34 sites were investigated and 22 of these met the criteria for a wetland. The number of wetland sites is higher than that reported in the 1992 wetland evaluation (OEA Research 1992), however, the actual wetland sites and mapping are similar. The difference in the number of

wetlands is attributed to the grouping of wetlands in the 1992 report versus listing individual wetland sites in the updated BRR.

Impacts

No impacts to wetlands or Waters of the US would occur with the No Action Alternative.

As described in the REA/FONSI (1994), measures have been taken to avoid and minimize impacts to wetlands with the Preferred Alternative. Additional measures have been taken to steepen side slopes to reduce and/or avoid adjacent wetland impacts. Unavoidable impacts to wetlands as a result of the road construction and relocation of Swamp Creek are estimated at 8.3 hectares (20.52 acres).

Revised Table 4-8, Wetlands Affected by the Proposed Project

Wetland Site Number	Location (Approximate Road Stationing)	Wetland Type ¹	Category	Estimated Area of Impact (acres)	
				Creek Construction	Road
1	10+00 – 12+20 L ² 10+80 – 11+50 R	Palustrine, forested wetland, broad-leaved deciduous. (South of Libby Creek)	Category II	0	0.47
2	11+50 – 13+30 R	Palustrine, emergent wetland, persistent	Category III	0	0.34
3	12+20 – 14+25 L	Palustrine, emergent wetland, persistent	Category III	0	0.82
4	14+75 – 18+00 R	Palustrine, emergent wetland, persistent (historical Swamp Creek channel)	Category IV	0.33	0
5	19+00 – 19+75 R	Palustrine, emergent wetland, persistent	Category III	0.01	0
6	14+25 – 21+00 L 29+75 – 56+00 L&R 57+80 – 75+00 L&R 118+00 – 120+00 L&R	Palustrine, scrub-shrub, broad-leaved deciduous (Swamp Creek & Reinhart Gulch)	Category II	0.45	4.43
8	66+00 – 73+25 R 74+00 – 92+00 L 79+00 – 82+00 R	Palustrine emergent wetland, persistent	Category IV	0.45	6.18
9	78+10 – 79+00 R	Palustrine, scrub-shrub, broad-leaved deciduous	Category IV	0	0.03
11	90+75 – 91+60 R	Palustrine, scrub-shrub, broad-leaved deciduous	Category IV	0	0.03
12*	97+00 – 111+60 L 104+00 – 105+40 R	Palustrine, emergent wetland, persistent	Category IV	0.06	5.62
15	123+00 – 124+50 R	Palustrine, scrub-shrub, broad-leaved deciduous (Swamp Creek)	Category III	0	0.11
16	135+00 – 135+30 L&R	Palustrine, scrub-shrub, broad-leaved deciduous	Category III	0	0.01
17	144+40 – 146+25L 145+50 – 158+00 R	Palustrine, emergent wetland, persistent (Schrieber Meadows)	Category IV	0	0.93
19	176+00 – 177+00 R 180+20 – 184+00 L&R	Palustrine, scrub-shrub, broad-leaved deciduous (Schrieber Creek)	Category II	0.06	0
21	203+00 – 204+00 L&R	Palustrine, scrub-shrub, broad-leaved deciduous	Category III	0	0.13
SUBTOTAL				1.36 ac.	19.16 ac.
TOTAL				20.52 acres	

*Areas that differ from the 1992 wetlands report (OEA Research 1992c) in terms of presence or extent of wetlands.
¹Cowardin et al (1979) wetland classification system.

²L indicates the left-hand side of the road when traveling from the project start to the end; R indicates the right-hand side.

Table 4-8b identifies the breakdown of impacts by Category type.

Table 4-8b Wetland Impact Calculations

	Roadway Impacts (acres)	Swamp Creek Impacts (acres)	Total Impacts by Category
Category II	4.96	0.51	5.47
Category III	1.41	0.01	1.42
Category IV	12.79	0.84	13.63
Total	19.16	1.36	20.52 acres

Mitigation

On-site wetland creation mitigation

In areas where Swamp Creek is impacted by road improvements, the new Swamp Creek design replaces the existing straight channel with a natural, sinuous (meandering) channel and a floodplain. In areas where the existing channel will be relocated in existing wetlands, the wetlands will be restored and expanded along the new banks, to the extent feasible considering the Rosgen channel type. In other areas, the new channel will be created in uplands, providing opportunity to create new wetlands. The channel banks will be completely revegetated using transplanted material or native wetland plant material from local sources. All locations of Swamp Creek reconstruction will be revegetated with wetland and riparian plant communities to restore the natural processes and provide bank stabilization. Revegetation will include wetlands created/restored adjacent to the creek edge, with overhanging woody shrubs, transitioning to an upland area. This general planting scheme will vary depending on the individual channel type and width of floodplain established. Approximately 727 meters (2,386 linear feet) of channel will be added to the Swamp Creek drainage system within the project study area.

To address the wetland impact to mitigation ratio calculation, MDT proposes that the approximately 727 meters (2,386 linear feet) of new stream length be treated as mitigation credit for the 0.55 hectare (1.36 acres) of wetland impacts incurred during the Swamp Creek reconstruction effort. A Section 404 permit application has been submitted to the US Army Corps of Engineers for this coordination.

MDT proposes to create approximately 2.2 hectares (5.44 acres) of wetlands and restore 0.1 hectares (0.25 acres) of wetlands along the relocated and historical Swamp Creek channel, between roadway stationing 15+00 to 18+00. Water rights will be required for the work in the Swamp Creek drainage at Cowell Creek located on Plum Creek property, based on current guidance from the NRCS. Since MDT is likely to purchase much of the parcel from Plum Creek, there is an opportunity to obtain associated water rights. The natural and replaced wetlands for the project are tied to the stream's hydrology and will be supported by the in-stream flows and natural runoff during high runoff events. If MDT is purchasing any parcels in their entirety it is recommended that corresponding water rights be purchased.

Additionally, coordination is on-going with a couple of landowners that may agree to a conservation easement so that MDT can take credit for wetlands created on these properties. This would amount to approximately 0.1 hectare (0.25 acre). No changes to the quantity or approach of wetland mitigation will occur in the event the conservation easements are not secured with these landowners. The restored and created wetlands would be on land owned by Plum Creek Timber Company, the US Forest Service or within MDT right-of-way. Based on current design plans, the created and restored wetlands will be similar to the existing Category II wetlands, due to their native and diverse vegetation, similar soils and hydrologic regime, and their relationship and benefit to T/E

and sensitive species habitat. These created wetlands will mitigate wetlands impacted by the project construction impacts.

Table 4-8c Wetland Replacement Locations for Mitigation Credit

Swamp Creek Station	Acreage	Land Ownership	Wetland type
14+90 to 18+20 ⁽¹⁾	0.04	MDT ROW	Emergent
10+00 to 13+10	0.16	MDT ROW	Scrub-shrub/emergent ⁽²⁾
20+00 to 33+00	1.34	Plum Creek Timber Co. /NFSL	Scrub-shrub/emergent ⁽²⁾
36+20 to 38+00	0.28	Plum Creek Timber Co.	Scrub-shrub/emergent ⁽²⁾
40+00 to 41+60	0.15	NFSL	Scrub-shrub/emergent ⁽²⁾
50+00 to 51+20	0.10	NFSL	Scrub-shrub/emergent ⁽²⁾
60+00 to 69+90	3.30	MDT to purchase from Plum Creek Timber Co.	Emergent/Scrub-shrub ^(2,3)
90+00 to 93+70	0.11	MDT ROW	Scrub-shrub
TOTAL	5.44 acres		

(1) Stationing refers to road stationing at this location. Remnant creek will be filled with transplanted wetlands to re-establish wetlands in this location.

(2) Wetlands will be created in the floodplain of the relocated Swamp Creek channel.

(3) Wetlands will also be created in excavated depressional areas adjacent to the reconstructed Swamp Creek/Cowell Creek drainage.

Schrieber Meadows

Included in the wetland mitigation plan is a site known as Schrieber Meadows. It is a 6.5 hectares (16 acres) parcel located within the project limits on the west side of Highway 2, north of Schrieber Lake. The area is owned and managed by the Kootenai National Forest and coordination for this site with MDT and the Kootenai National Forest is ongoing. It is estimated that approximately 1.4 hectares (3.5 acres) of wet meadow type of wetlands will be created at this site. The mitigation design concept includes restoring Coyote Creek and the original hydrology to the site and creating shallow open water areas that will develop emergent wetlands. The creek would be designed to restore creek functions and values. Water rights may be recommended as part of the proposed design. This will be determined as the project design progresses. (NOTE: The mitigation site at Schrieber Meadows will be processed under a separate Section 404 permit application.)

McGinnis Meadows

Another component of the mitigation plan is the use of mitigation credits from the McGinnis Meadows site owned by MDT and located approximately 32 km (20 miles) off US Hwy 2 in the Hughes Creek drainage. McGinnis Creek is mostly channelized and flows through meadows. The project proposes wetland creation and restoration and creek restoration to restore McGinnis Creek to its historical channel and re-establish natural meanders. Wetland restoration includes re-establishment of scrub shrub, emergent and riparian communities. These are anticipated to be Class II wetlands. Approximately 4.4-6.1 hectares (10-15 acres) of credit would be available. It is anticipated, based on the current Swamp Creek design, that 4.4 hectares (10 acres) of mitigation credit is estimated to be needed for the Swamp Creek project from this site. Water rights may be recommended as part of the proposed design. This will be determined as the project design progresses. (NOTE: The mitigation site at McGinnis Meadows will be processed under a separate Section 404 permit application.)

4.12 Fish, Wildlife, Vegetation, and Noxious Weeds

The *Revised Biological Resources Report (BRR)* (WEST Inc., 2001) updates information provided in three previous biological reports prepared for this project in 1992, including a Biological and Sensitive Species report, a Biological Assessment, and a Wetlands Evaluation report (OEA Research 1992a, b, c). Information from these three previous reports has been updated and combined into one report per current Montana Department of Transportation (MDT) guidelines.

Specifically, the report includes 1) information on general biological resources including terrestrial, aquatic, and rare and sensitive species, 2) a Biological Assessment (BA) addressing federally-listed threatened, endangered, proposed, and candidate species, and 3) a wetlands finding report using the 1987 US Army Corps of Engineers wetland delineation methods and MDT's updated wetland assessment method (Berglund 1999).

Fish

Existing Conditions

In the 1992 Biological Report, Swamp Creek was divided into seven reaches for habitat descriptions based on bridge crossings. These reaches were redefined in 2000 based on adjacent habitat and land use, which influences stream habitat and conditions. The *Revised Biological Resources Report* (WEST Inc., 2001) describes the vegetation cover, water temperature measurements, stream bed composition, embeddedness, fish habitat and barriers, and likely fish species for Swamp Creek, Schrieber Creek, Miller Creek, Libby Creek and the Fisher River.

Impacts

The impacts described in the REA/FONSI (1994) are consistent with *The Revised Biological Resources Report* (WEST Inc., 2001).

Mitigation

Additional fishery mitigation measures and habitat structures proposed in *The Revised Biological Resources Report* (WEST Inc., 2001) and *The Final Design Report: Swamp Creek Relocation Project* (WCI, 2000) include:

- Instream work should be conducted during low flows to minimize disturbance to aquatic resources.
- Culverts should be installed in a manner that does not create a barrier to fish movement.
- Habitat structures proposed include: channel constrictor, bank cover, half log cover, floating log cover, submerged shelter (meander), submerged shelter (straight), vortex rock weir, W weir, and bank placed rootwads. These structures would be located in areas identified as appropriate based on the channel type (Rosgen 1996).

Wildlife

Existing Conditions

Additional information is provided in *The Revised Biological Resources Report* (WEST Inc., 2001) regarding small mammals, reptiles, amphibians, and birds within the project vicinity. It is documented that black bears may use mature cottonwoods along the Fisher River for denning and are attracted to the county dumpsters located at MP 47.

Impacts

The No Action Alternative would not impact wildlife or potential habitat over existing conditions.

The Preferred Alternative improvements in the project area would pose some direct threats to wildlife. The primary habitats that would be affected are the roadside meadows (including wet meadows as well as hay fields) and forests. Few bird species use the meadow habitat for nesting, although migratory species such as sandhill crane and killdeer may use the meadows for foraging. Some small mammals and reptiles also likely use this habitat. Construction activities will displace and/or kill small numbers of these species unable to escape construction equipment. Some forest habitat will be lost due to the re-alignment, therefore, some nesting sites or potential nesting sites for birds would be lost. Other nesting sites that could be removed during construction would include culverts that are replaced and rocky outcrops within the right-of-way. This type of localized loss is

common with construction activities such as road reconstruction, and such losses are often short-term and recovered by recruitment from adjacent populations over time. Such losses would reduce the available prey for raptors and other carnivores by a negligible amount.

The proposed Swamp Creek-East highway project will result in small, direct losses of wildlife habitat associated with realignment and ROW clearing. None of these losses will result in population change or loss of viability. The proposed project is consistent and compliant with direction contained in the Kootenai Forest Plan.

Once construction is finished, the improved road could result in fewer collisions with wildlife because motorists will have improved stopping sight distance and greater clear zone. However, the improved highway may result in increased traffic and speed, and thus increase the potential for vehicle collisions with big game, small mammals, and birds. Some level of vehicle/wildlife mortality is largely unavoidable.

Mitigation

The mitigation measures listed in the REA/FONSI (1994) are consistent with *The Revised Biological Resources Report* (WEST, Inc. 2001).

Vegetation

Existing Conditions

Information provided in the REA/FONSI (1994) is consistent with *The Revised Biological Resources Report* (WEST, Inc. 2001).

Impacts

No additional impacts to vegetation would occur with the No Action Alternative.

In addition to those described in the REA/FONSI (1994) for the Preferred Alternative, impacts to the riparian community associated with Swamp Creek will occur where the new highway encroaches into the existing Swamp Creek channel. However, the relocated Swamp Creek channel will likely, over time and through project revegetation efforts, develop a similar riparian community. Transplanting impacted wetland and riparian vegetation is proposed as part of the Swamp Creek revegetation plan.

Impacts will occur to other vegetation communities that occur within the proposed right-of-way, area cleared for utility relocation, additional work/storage space, and clear zone.

Mitigation

Additional mitigation recommended includes: Keep all clearing and grubbing operations strictly confined to MDT's defined construction limits (except for areas where utility corridors extend beyond construction limits), instead of clearing the entire right-of-way.

Noxious Weeds

Existing Conditions

Both the federal and state governments have regulations concerning noxious weeds. Executive Order 13112, signed in February 1999, requires federal agencies whose actions may affect the status of invasive species to prevent the introduction of invasive species; detect and control populations of such species; monitor invasive species populations; and restore native species and habitats that have been invaded, to the extent practical and permitted by law. At the state level, Montana assigns responsibility for noxious weed control to each county.

The former BRR and REA/FONSI (1994) stated that weed control measures had been effective in the right-of-way and that adjacent lands were generally free of weeds. However, during the 2000 field surveys, noxious weeds were observed in many meadows, particularly ox-eye daisy and orange hawkweed. Canada thistle, houndstongue, and spotted knapweed were observed in several locations in the right-of-way. With the exception of orange hawkweed, these species are Category I species on the Montana state noxious weed list. The spread of these weeds can render land unfit or greatly limit beneficial uses.

Impacts

No additional land would be disturbed by the No Action Alternative and therefore would not be susceptible to noxious weeds from construction activity.

Most noxious and invasive weeds are aggressive species that have a strong competitive advantage over other species on disturbed soils. Therefore, all areas disturbed by the Preferred Alternative are potential habitat for noxious and invasive species, particularly those species identified in the project area. The degree of impact from noxious and invasive species largely depends on the implementation of mitigation measures during and after construction.

Mitigation

The project contract will include additional project specific funding to Lincoln County for the control of noxious weeds along the project corridor for a period of five years. In addition, Lincoln County receives funding to provide long-term management and control of noxious weeds along the public roadways. An additional mitigation measure identified in *The Revised Biological Resources Report* (WEST Inc., 2001) is to ensure that seed, topsoil, and mulch used for the revegetation is certified weed-free.

4.13 Threatened, Endangered, Rare and Sensitive Species

T & E Species

Existing Conditions

Peregrine falcon, an endangered species identified in the 1992 BA as potentially occurring in the project area in the 1992 BA, was de-listed in August 1999. Bald eagle, an endangered species also identified in the 1992 BA as potentially occurring in the project area, is currently listed as threatened and was proposed for de-listing in July 1999. *The Revised Biological Resources Report* (WEST Inc., 2001) adds two endangered species noted as potentially occurring in the project area: gray wolf and white sturgeon. Threatened species noted as potentially occurring in the project area were updated to include bull trout, which is documented to occur in Swamp Creek, grizzly bear, and Canada lynx. The Biological Assessment was submitted to the USFWS for formal consultation for the protected species and a biological opinion was issued on July 9, 2001.

The REA/FONSI (1994) noted two endangered plant species and eight threatened plant species included under the Region 1 Kootenai National Forest Sensitive Species List for Lincoln County. Surveys conducted in 1992 and 1993 found no listed plant species in the proposed right-of-way for any alternative alignment.

In 1994, the white sturgeon was listed as an endangered species. The population was essentially reproductively mature (no individuals younger than 20 years old) at the time of listing. White sturgeon in the Kootenai River are uncommon above Bonner's Ferry, Idaho. It has been estimated that only 20% of the population resides in Montana in the stretch below Kootenai Falls. Studies in the early 1990's found the majority of spawning occurred in an approximately 19.3 km (12 mile) stretch of river between Shorty's Island and Bonner's Ferry, Idaho.

The gray wolf, listed as an endangered species, has historically occurred in a wide range of habitats and is currently restricted to forested areas. The closest known pack occurs 32 km (20 miles) east of the project in Pleasant Valley. Based on the habitat, propensity for long range movements, proximity of wolf packs in northwest Montana, as well as the presence of wolf packs in Canada, wolves are expected to periodically occur in the project area. Over the past 15 years, there have been occasional sightings of wolves in the Silver Butte Drainage and along West Fisher Creek, approx. 1.6 km (1 mile) south, and the USFWS has records of wolves south of Libby. As wolf recovery efforts proceed, it is possible that one or more wolf packs may occupy lands, which overlap the project.

Grizzly bears, listed as a threatened species, are very rare near the project area. Within the Cabinet Mountains, the grizzly bear population is estimated at 15 or fewer individuals. Grizzlies with cubs have been documented within 1.6-2.3 km (1-2 miles) of the project area. They have been documented along West Fisher Creek east of the project area. The project area does not encompass any protected grizzly bear habitat, however, the eastern edge of the grizzly bear recovery zone is located 3.2 km (2 miles) west of the project area. Potential use of the project area is likely limited to forage of green grass in the spring and chokecherries in the fall.

Bull trout, listed as a threatened species, are found throughout the tributaries of the Kootenai River within Lincoln County. Within the project area bull trout have been documented within Swamp Creek, Libby Creek and Fisher River. Additionally, it is suspected that juvenile bull trout in the Fisher River likely use Miller Creek. No bull trout redds were located in Swamp Creek. Montana Fish Wildlife and Parks has no information about fish in Swamp Creek above the irrigation diversion near Farm-to-Market Road. Adult fluvial (migratory) bull trout migrate up Libby Creek and the Fisher River from the Kootenai River to spawn in cold water tributaries.

The Montana Rivers Information System (MRIS) database indicates that bull trout are incidental in Libby Creek and rare in the Fisher River in the reaches that are near the project area. In both streams, bull trout are present primarily during migration. The MRIS does not indicate that Miller Creek is used by bull trout and it does not contain data regarding Swamp Creek or Schrieber Creek.

Canada lynx was listed as a threatened species on March 24, 2000. The primary threats to the species include human alteration of lynx habitat, past exploitation, range expansion of competitors and elevated human access into lynx habitat. Lynx are considered solitary animals that associate only for breeding and rearing young. Lynx are highly specialized predators whose primary prey are snowshoe hares. Lynx are generally associated with boreal forests in northern latitudes and in the lower 48 states forested mountains, occasionally areas above the treeline, and large swamps in eastern parts of their range. Dispersal from the preferred habitat has been linked to snowshoe hare population fluctuations. In Montana, the majority of lynx records have been in the western Rocky Mountain part of the state.

The bald eagle was listed as endangered and reclassified in 1995 to threatened in all of the lower 48 states. The species has been doubling its breeding population every 6-7 years in the lower 48 states since the late 1970's. In Montana, bald eagles were most common in the northwest portion of the state. Large concentrations of fall migrating eagles occur along north-south running ridgelines in Montana. Currently, breeding bald eagles are most common in the northwest portion of the state. Some bald eagles overwinter in Montana near open sources of water or occasionally in upland big game winter ranges.

Impacts

No impacts to Threatened or Endangered species would occur with the No Action Alternative.

Based on the current knowledge of species ranges and habitat affinities, white sturgeon is not expected to be affected by the Preferred Alternative, including project construction, the Swamp Creek channel changes, or operation of the highway following project completion. The project is not expected to directly or indirectly affect white sturgeon.

Gray wolf, grizzly bear, bull trout, Canada lynx, and bald eagle have all been documented in or near the project area and may occur there during the period of construction and after project completion. The proposed project may affect these species.

As of 1999, one pack of three gray wolves could possibly use the project area. As with other rare large carnivores, the project has the potential to affect wolves through loss of habitat, creating a barrier to movement, disturbance or displacement, or mortality. Habitat loss to wolves from the project is insignificant. Additionally, the highway is not expected to create a barrier or influence wolf movements through the region. Potential impacts to wolves from the project are discountable (extremely unlikely to occur, essentially not expected to occur) and insignificant. The project is not likely to adversely affect gray wolves.

A small population of grizzly bears exists in the Cabinet Mountains, west of the project area. As with other large predators, the project has the potential to affect grizzly bear through habitat loss, creating a barrier to movement, disturbance or displacement, and mortality. Grizzly bears may occasionally occur in the project area, however, based on available information the project corridor is not considered grizzly bear habitat and it is outside of Bear Management Units of the USFS. Habitat loss to grizzly bears from the project is insignificant. Potential impacts to grizzly bears from the project are discountable and insignificant. The project is not likely to adversely affect grizzly bears.

While there is little evidence of Canada lynx occurring near the project area, there is suitable habitat in the surrounding forests. The immediate highway corridor is not considered lynx habitat due to elevation, drier forest types, and limited snowpack accumulation. Lynx use of the area would be confined to dispersing lynx from surrounding suitable habitat. While it has not been confirmed, it is expected that lynx may periodically cross US Highway 2 and may do so within the project limits. The proposed project may effect lynx through creating a barrier to movement, disturbance or displacement, or mortality. Due to high human presence in the project area, suitable habitat around the project is likely underutilized by lynx, which further reduces the potential for project effects. The project is not likely to adversely affect Canada lynx.

Direct effects to bald eagles from the project may include loss of riparian habitat, disturbance, and displacement. Indirect effects from the project may include water quality degradation, loss of prey, and potential mortality of individual bald eagles. Bald eagles are known to use the project area, however, they are not known to nest there. Use by bald eagles is probably concentrated along the rivers where they forage for fish. The cottonwood riparian corridors of Libby Creek and Fisher River, which will not be affected, are more suited to bald eagle use than the alder shrub riparian habitat of Swamp Creek. The project may temporarily alter foraging patterns of bald eagles, but due to bald eagle movement ability, this effect is considered insignificant and will be short term. Potential impacts to bald eagle from the project are discountable and insignificant. The project is not likely to adversely affect bald eagles.

Bull trout occur in Libby Creek, Fisher River, and Swamp Creek in the project area. Potential effects on bull trout for the project include:

- Sedimentation from construction activity and Swamp Creek channel modification.
- Potential oil/gas contamination from equipment working in the streams and/or spills within the project area.
- Loss of riparian vegetation.
- Direct mortality of fish in the stream during in-stream construction.
- Long term increase in runoff from an increased area of impervious surfaces.
- Long term increase in sediment loads from increased sanding/graveling of the highway during winter months.
- Introduction of contaminants such as petroleum products from the highway during runoff events.
- Stochastic events such as a traffic accident which leads to stream impacts.

Bull trout have been documented in the project area including Swamp Creek. Construction of the Swamp Creek channel may lead to take of juvenile bull trout. Sediment affects may also temporarily affect bull trout downstream in Libby Creek, however, these effects are expected to diminish with distance downstream and bull trout in the Kootenai River are not expected to be affected. Restoration of the Swamp Creek channel to closer to pre-highway conditions may have long-term benefits to bull trout. The new stream channel and habitat will replace prior habitat losses and should improve stream quality and habitat over existing conditions. However, the project construction may lead to take of bull trout. Therefore, the appropriate determination from the Swamp Creek project Biological Opinion is likely to adversely affect bull trout.

A Biological Opinion issued on July 9, 2001 by the USFWS determined this project is not likely to result in jeopardy to the Columbia River Basin population of bull trout. No critical habitat has been designated for bull trout; therefore, none will be affected. All terms and conditions for in-stream work and construction activities identified in the biological opinion have been included in the project special provisions. The measures included in the design to increase fish passage and avoid barriers, provide and improve habitat, etc. all help to balance the likelihood of a fish kill with improving the current conditions for the species. So even though a bull trout may be killed during construction, the future of the species in this drainage is expected to be improved by the construction of the creek project.

Rare & Sensitive Species

Existing Conditions

The Revised Biological Resources Report (WEST Inc., 2001) noted twelve sensitive species or species of concern for Lincoln County by the Kootenai National Forest or the Montana National Heritage Program, which were known to occur or likely to occur in the project area. Habitat for six of these species is present within the project area. These species are not listed as threatened or endangered under the federal Endangered Species Act (ESA). The Forest Plan identifies a number of management indicator species (MIS) to monitor the effects of management activities on biological communities and habitats. Included in these are Threatened and Endangered (T/E) Species; Species Hunted, Fished and Trapped; and Other Species.

Plants, birds, amphibians and animals are considered. Three of the species listed in the REA/FONSI (1994) are not included in the information provided for *The Revised Biological Resources Report* (WEST Inc., 2001). These are the boreal owl, Columbian sharp-tailed grouse and the woodland caribou. The lynx is now listed as an ESA threatened species and has been

addressed in the T/E Section. *The Revised Biological Resources Report* (WEST Inc., 2001) adds the following species or species potentially occurring in the project area: wolverine, northern goshawk, peregrine falcon, boreal toad, northern leopard frog, westslope cutthroat trout, redband trout, and torrent sculpin.

A search for records of occurrence in the Montana Natural Heritage Program (MNHP) database found mountain moonwort recorded in the project vicinity. Surveys conducted in 1992 and 1993 found no listed plant species in the proposed right-of-way for any alternative alignment.

Impacts

No impacts to Rare or Sensitive species would occur with the No Action Alternative.

The Preferred Alternative is unlikely to impact rare and sensitive mammals, birds, or amphibians because none are known to inhabit the project area, although several species could use the area seasonally or as transients. The presence of the existing highway probably limits the value of the habitat for most of the species. During construction, it is possible that the proposed project could directly impact a species occupying the project area or could result in avoidance of the project area by a transient, when noise and other disturbances would be at the highest. Any impact is unlikely to affect the status of a plant or animal rare and sensitive species.

Species Hunted, Fished or Trapped: Elk and whitetail deer are the MIS for general forest species, and mountain goat is the MIS for alpine species. The proposed project will result in minor losses of habitat for elk and whitetail deer, but these losses will not affect population levels or current use. Mountain goats do not occur within the project area and would not be affected by the project.

Other Species: The pileated woodpecker is the MIS for snags and old-growth timber. Re-alignment and ROW clearing associated with the project will result in the direct loss of existing snags and small, insignificant losses of old growth habitat. These losses would not result in population changes or loss of population viability to pileated woodpeckers or associated old growth or cavity habitat species.

The proposed project will have no impact to the northern bog lemming, peregrine falcon, common loon, Columbian sharp-tailed grouse, and northern leopard frog, since these species are not expected to occur in the project area.

Sensitive fish species are likely to be impacted by the Preferred Alternative, particularly westslope cutthroat trout and torrent sculpin, both observed in Swamp Creek. Impacts during channel realignment of Swamp Creek could include direct mortality and habitat degradation from sedimentation and loss of riparian vegetation. However, following bank revegetation and removal of fish barriers, long-term impacts are expected to be beneficial.

The Preferred Alternative is unlikely to impact rare and sensitive plant species because few individuals or populations have been documented within or near the project area and habitat for many of the species is limited. However, some impacts could occur if undocumented populations are present.

Mitigation

Recommended mitigation measures in *The Revised Biological Resources Report* (WEST, Inc., 2001) include:

- Confinement of clearing and grubbing operations to the construction limits.
- Prompt revegetation with local, native plant species not highly palatable to big game animals.

- Design of relocated powerlines to prevent raptor electrocution.
- Use of Best Management Practices that minimize potential for increase of sediment loads.
- Performance of instream work during low flows.
- Culvert installation which does not create a barrier to fish movement.
- REA/FONSI mitigation measures also include covering and revegetation of potential mineral licks encountered in roadway excavation area and prompt removal of road-kills.

4.14 Cultural Resources

Existing Conditions

The REA/FONSI (1994) identified three recorded sites. They are the Schneider Farmstead (24LN822), Swamp Creek Timber Bridge (24LN766), and Swamp Creek Ranger Station (24LN541). The proposed project roadway design has not changed; therefore discussion covering impacts and mitigation on those sites remains accurate. The Data Recovery plan for the Swamp Creek Ranger Station site was developed and implemented.

Aaberg Cultural Resource Consulting Service (ACRCS) conducted a Class III pedestrian survey of the Swamp Creek study area in August of 2000. The 19.6 km (12.2 mile) US Highway 2 project corridor was investigated at a reconnaissance level by ACRCS to determine if any previously unrecorded historic features or structures occur within a corridor 61 km (200 feet) on either side of the highway centerline.

The *Swamp Creek East Channel Change Inventory and Historic Structures Survey of US Highway 2 in Lincoln County, Montana* (ACRCS, 2000) documented five new sites recorded during this project survey. Two sites (24LN1815 and 24LN1817) were discovered as a result of the recent Swamp Creek survey, while three sites (24LN1814, 24LN1816, and 24LN1818) were recorded during the recent reconnaissance level survey of the US Highway 2 project corridor. Table 2 provides additional information on these sites.

Summary of Additional Recorded Sites

Survey Number	Site Name	Description	Inside Area of Potential Effect?	NRHP Status
24LN1814 (Libby-1)	(Hawden/Buckingham) Farm	Farmstead (house and 8 outbuildings)	yes	Not eligible
24LN1815 (Libby-2)	Heat-altered rock scatter	Fire Cracked Rock scatter	yes	Not eligible
24LN1816 (Libby-3)	(Husick) homestead	log structure	no	Not eligible
24LN1817 (Libby-4)	J. Neils Logging Co. Swamp Creek Line railroad grade	Railroad grade	yes	Covered by MDT PA
24LN1818 (Libby-5)	US Highway 2	Road	yes	Covered by MDT PA

PA= Programmatic Agreement

Four of the sites are historic structures or features dating to the 1930's and 1940's, of which two of the historic structures (24LN1814, 24LN1816) are recommended as not eligible for listing in the National Register of Historic Places (NRHP).

One site (24LN1815) could be either historic or prehistoric in age and contained a small amount of heat-altered rock near the surface of a gravel terrace. Shovel testing suggests little potential for

presence of intact cultural deposits with dateable organic or diagnostic artifacts. Therefore, the site was recommended as not eligible for listing in the NRHP.

The J. Neils Logging Co. Swamp Creek Line railroad grade- (24LN1817) is covered by a Programmatic Agreement and was not evaluated further. The Programmatic Agreement was developed in 1989 between the Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and the MDT. The purpose of the PA is to eliminate the need for evaluating, assessing and mitigating effects to individual segments of railroads.

The US Highway 2- (24LN1818) site is covered by a Historic Preservation Plan for roads and bridges developed in 1989 and amended in 1997. This plan was developed as a condition of a Programmatic Agreement (PA) between the Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and the MDT. The purpose of the PA is to eliminate the need for evaluating, assessing and mitigating effects to individual segments of roads and bridges.

With the exception of 24LN765 and 24LN766 (described in the REA/FONSI (1994) as the Swamp Creek Timber Bridge at milepost 46.7), previously recorded sites were not revisited or re-recorded. The two reinvestigated sites are historic balustrade-style concrete guardrail bridges on US Highway 2 which cross Swamp Creek. Under the terms of the PA, photographic recordation of these historic bridges will be completed prior to their replacement. Other conditions of the PA will also be carried out as described in the REA/FONSI in Section 4.14.

Impacts

No impacts to cultural resources will occur with the No Action Alternative.

The anticipated project impacts resulting from the Preferred Alternative, to the surveyed segments of the J. Neils Logging Co. Swamp Creek Line railroad grade- (24LN1817), will be local and minimal. The relocation of Swamp Creek may impact some segments of the old grade, but will not destroy all remnants of the grade. Previous reports suggest that if substantial segments of railroad grade remain undisturbed then it is likely that the grade and associated features would be eligible for listing in the NRHP.

Site 24LN1818 consists of the current US Highway 2 alignment that was constructed in the mid-1930's. The project area segment of US Highway 2 will likely be destroyed or altered by highway realignment, reconstruction and relocation of Swamp Creek. MDT is the owner of the right-of-way including US Hwy 2.

In compliance with the Section 4(f) Programmatic Agreements applicable to sites (24LN1817) and (24LN1818), a completed "Nationwide" *Section 4(f)* Evaluation is attached to this re-evaluation.

Mitigation

In the event that subsurface archaeological resources are encountered during ground disturbing activities, all work shall stop until the MDT Staff Archaeologist evaluates the materials for National Register significance.

4.14.1 Section 4(f) of the US Department of Transportation Act

The provisions of Section 4(f) of the 1966 US Department of Transportation Act (49 USC 303) apply to any FHWA-funded action when it affects the following:

- a. Publicly owned parks and/or recreation areas;
- b. Publicly owned wildlife/waterfowl refuges;
- c. Sites on or eligible for listing in the National Register of Historic Places under Section 106 of the National Historic Preservation Act (16 USC 470);
- d. Public lands managed for multiple-use with specifically-designated recreational or wildlife/waterfowl management site(s), and under statute(s) providing for same.

Section 4(f) prohibits use of public land in a park, recreation area, significant waterfowl or wildlife refuge, or significant historic site, unless:

1. There is no feasible or prudent alternative to the use of such land; and
2. The project includes all possible planning to minimize harm.

According to the regulations in 23 CFR 771.135(a), a Section 4(f) evaluation must be prepared for use of the Section 4(f) property. Two types of use constitute impact to a Section 4(f) property:

- Direct conversion of use of a Section 4(f) property that results from the purchase, lease, easement, or agreement to change the use of all or a portion of the property.
- Constructive use that results from an action that would "substantially impair" current use of a Section 4(f) property. Constructive use can occur from impacts related to noise, visual intrusion, major access restrictions, vibration, or ecological intrusion. For historical properties, a constructive use occurs when there is an impact that would substantially impair the historic integrity of the property.

Implementation of the Preferred Alternative will result in direct impacts to two historic properties. As stated previously, the J. Neils Logging Co. Swamp Creek railroad grade (24LN1817) and US Highway 2 (24LN1818) are covered by a Programmatic Agreement between FHWA, ACHP, SHPO, and MDT and therefore were not evaluated or assessed for effects. As a result of this PA, evaluation of significance was not undertaken. The PA was developed to address the Section 106 requirements. Section 4(f) requires the determination of eligibility to the NRHP in order to determine if a site is a Section 4(f) resource. Since this was not undertaken Programmatic Section 4(f) evaluations have been prepared for these two historic sites, assuming that they could be eligible to the NRHP. These are included in Appendix A.

4.15 Hazardous Waste

Existing Conditions

An assessment to evaluate the potential for encountering soil and/or groundwater contamination within the project study area was conducted in 2000. The assessment is based on information obtained from record review, interviews, aerial photograph interpretation and visual site inspections. An environmental database search of federal and state listed hazardous materials locations was conducted in coordination with Environmental Data Resources, Inc. Information gathered by Chen-Northern, Inc., *1993 Initial Site Investigation, Coursien and Waylett Properties, Swamp Creek – East, Lincoln County, Montana* was referenced. The information presented in the REA/FONSI (1994) was confirmed.

1. Former Waylett's Gas Station located at approximately MP 55.7
Chen-Northern completed an Initial Site Investigation that included information regarding the former Waylett's Gas Station located at 22983 US Hwy 2 South, Libby. According to the Chen-Northern report, two inactive underground storage tanks (USTs) were removed in April 1993.
According to the Chen-Northern report, the UST's were located within the proposed new right-of-way, but near the outside edge and outside the limits of proposed excavation and embankment for roadway construction. The existing residence on the site will require relocation.
2. Coursien Property located at approximately MP 46.6
In 1992, Mr. Jim Coursien (property owner in 1992) indicated to Chen-Northern, Inc., that he had removed two USTs and one septic tank located on the south end of the property located at 14261 U.S. Highway 2 South, Libby, Montana (Milepost 46.7). According to the Montana UST Program, the removal of the tanks had not been permitted. One of the removed USTs was reportedly crushed during its removal and was disposed of by Mr. Coursien. Mr. Coursien also reported the septic tank, which was a wooden log, crib-like structure, was filled and closed in-place. The septic tank is suspected to have been connected to the service station's floor drains. Mr. Coursien did not own the property when the USTs were in use. These sites are outside the construction impact area.

As documented in Appendix C of the REA/FONSI (1994), Huntingdon/Chen-Northern prepared recommendations based on their additional monitoring to determine effects of the US Highway 2 improvements. Based on the previous design plans for Swamp Creek, it was anticipated that excavation activities would be to a depth of 0.3 to 0.9 meter (1-3 feet) below the existing roadway and shoulder surface, there would be potential for encountering contaminated material. Options for removal of contaminated material were outlined.

3. Propane ASTs
Numerous properties in the vicinity of the U.S. Highway 2 study area contain propane ASTs and would require closure prior to property acquisition.

MDT investigated the project corridor in 2001 for possible asbestos involvement. A review of the geology and mineral occurrences and soil samples indicates that it is unlikely that asbestos minerals or asbestos containing materials will be encountered in the reconstruction activities.

Impacts

No impacts to hazardous waste would occur with the No Action Alternative.

During construction of the Preferred Alternative, there is the potential for encountering contaminated soil and groundwater within the proposed construction area.

1. Former Waylett's Gas Station: On March 28, 1994 the Montana Department of Health and Environmental Sciences issued a letter of No Further Corrective Action Required for Petroleum release at the Waylett Property (Appendix B). The decision that no further corrective action is required was based upon the findings of the Chen-Northern investigations which indicate the contamination remaining is minor and confined to the former tank basin. Analytical results of samples collected from the domestic water supply well on site did not contain volatile organic compounds above the detection limit of the analyses. There does not appear to be significant impact to soil or groundwater from the tanks. No further action is recommended.

2. Coursien Property: Chen-Northern completed a *Limited Environmental Investigation Report* for the Coursien property in May 1993. According to the Chen-Northern report, UST's were removed from the Coursien site in 1990. The potential for health risk in the vicinity of the site is considered minimal.

This former UST site is within the current right-of-way of the Preferred Alternative, but outside the proposed construction limits. Channel changes proposed for the Preferred Alternative will be located approximately 35 meters (115 feet) south and up gradient of the site. A letter of No Further Corrective Action Required for Petroleum release at the Coursien site was issued by the Montana Department of Environmental Quality (MDEQ) Underground Storage Tank Program on September 6, 1995 (Appendix B). MDEQ determined that the corrective action was proper and that no further investigation or cleanup activities were necessary based on information and recommendations provided by Maxim Technologies, Inc., in the 1995 Annual Groundwater Monitoring report. The former design plans identified the relocated Swamp Creek channel close to these sites. However, the current design identifies these sites outside the construction impact area.

Mitigation

Propane ASTs: Acquisition properties with propane ASTs will require proper tank closure.

Potential impact to human health and safety should be minimized, through proper identification and management of contaminated materials in accordance with local, state and federal regulations. Chemical contamination in soil and/or groundwater may be encountered at one or more of these sites during project construction. Contaminated media, if encountered during construction, should be properly managed. In the event that such impacted media are encountered during construction activities; health and safety issues to workers will be properly be addressed.

In addition, intrusive activities such as drilling or excavation will require appropriate levels of worker protection. Excavated soils and any pumping or dewatering activities will require proper treatment and disposal. Closure of on-site ASTs will be required prior to property acquisitions for U.S. 2 construction.

To address the potential for asbestos in the fill material, the project contractor will be required to supply asbestos free fill material from sources that are certified to be free of asbestos.

4.18 Cumulative and Secondary Effects

Cumulative impacts are defined as impacts that "result from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) undertakes such other actions." Known projects in this vicinity, with an assessment of probable cumulative impact, are:

- Pleasant Valley (F 1-1 (39) 57) is a 13.4-kilometer (8.3-mile) reconstruction project to widen shoulders and lanes. It is on U.S. Highway 2 between the towns of Libby and Kalispell from milepost 57.3 to 65.6. It is currently under construction.
- Rock Scaling (NH 1-1 (66) 22) located on U.S. Highway 2 just west of the town of Libby. This project involves safety improvements by removing loose rocks from the canyon walls along 8.3 kilometers (5.2 miles) of roadway. It is scheduled to begin in August 2002.

- The Libby Ranger District of the Kootenai National Forest is proposing to implement resource projects in the Elliot Creek, Detgen Creek, Cowell Creek and Swamp Creek watershed. The project area is referred to South McSwede project area. The area is 20,000 acres of National Forest lands, Plum Creek Timber Company land, various privately owned land and the State of Montana land. The proposed projects include commercial timber harvest, precommercial thinning, hazardous fuels reduction, road construction, road decommissioning and access management, wildlife habitat enhancement, and prescribed burning. The projects are located on both sides of US Highway 2, approximately 10-18 miles south of the town of Libby. NEPA document is currently being prepared, with expected sale to occur in fall 2002.
- Libby Creek restoration project by Montana Fish Wildlife and Parks. Project included restoration of 2000 stream feet of Libby Creek by installing in-stream j-hook structures, rootwad bank stabilization structures and revegetation of riparian vegetation. The project was co-sponsored with the US Army Corps of Engineers as part of a bull trout recovery stream demonstration project. The project was completed in September 2001.

The first two projects described above are related to motorist safety and improving driving conditions within the US Hwy 2 corridor. The South McSwede project proposed by the Kootenai Forest will include a number of commercial timber harvest locations within the project study area. It is unlikely this action and the proposed highway improvements will cumulatively induce new growth to the area. The resulting combined effects would be related to the amount of timber and vegetation clearing of the two actions. Both actions will be required to coordinate clearing requirements within any sensitive viewsheds.

The Libby Creek restoration project and the Swamp Creek reconstruction/restoration activities will improve the fishery resource, reduce sedimentation and provide bank stabilization in these respective drainages.

The proposed project is not expected to contribute to population growth and development activities, but is designed to upgrade a substandard highway and meet current and future projected traffic volumes. The increase in population growth in the area is expected to occur with or without the project. This highway corridor is an important corridor for regional and interstate travel, as well as local motorists. Most of the local people who would use the improved highway are most likely already doing so, due the lack of other alternatives. The reconstruction improvements are would not draw traffic from other routes. The reconstruction improvements, by themselves, would not lead more people or businesses to settle in the area. As growth has been occurring in Libby and Lincoln County over the last decade (see Section 4.1), it has been for other amenities or factors, such as: employment opportunities, site specific amenities, scenic and aesthetic values, physical and socioeconomic conditions (availability of schools, utilities, communication service), landowner and development resources, and the availability of developable land.

Similarly, population growth is occurring and has occurred in western Montana in areas where there are inadequate roads, such as the Bitterroot Valley and the Flathead Lake/Whitefish areas. This leads to the conclusion that population and resulting traffic growth are influenced by many factors beyond project improvements such as those proposed on this project.

As the growth in Libby and Lincoln County continue, further development may contribute cumulative effects to Endangered Species Act listed species in the area by simply bringing more people into species habitats. Development can result in the conversion of open spaces including forested lands to residential and commercial areas.

There is no indication that the long-term affects of this project, when combined with the effects of other known past, present or reasonably foreseeable future projects will cause significant harm to the natural or human environment.

Temporary increases in truck traffic during construction would cause increased dust, noise, and traffic delays along these roads.

Permits and Coordination

The following permits will be obtained for the project prior to construction:

- Section 404 permit from the US Army Corps of Engineers
- A Stream Protection Act 124 permit from the Montana Fish Wildlife and Parks
- A Montana Pollutant Discharge Elimination System (MPDES) permit from the Montana Department of Environmental Quality
- Floodplain permit from Lincoln County
- A Special Use Permit issued from the Kootenai National Forest
- Weed Control plan approval from Lincoln County

5.0 Public Involvement

Public involvement activities that have occurred since the REA/FONSI was signed in 1994 include:

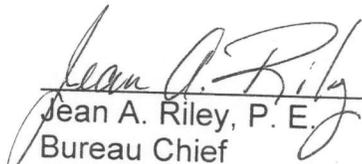
- A public meeting held July 6, 2000 in Libby with advertisement through a press release and newsletter mailed to all landowners and members of the public who had previously commented on the project or attended meetings.
- Letters to all landowners within the project corridor were mailed on July 19, 2000 with project design plans for their individual properties. Lincoln County representatives were also mailed a plan set for their review.
- An invitation was mailed on September 26, 2000 to all landowners along the project corridor with an offer to meet to discuss project issues. Individual landowner meetings were held to discuss Swamp Creek channel changes on their property.
- Additional landowner meetings with landowners whose properties were affected by the Swamp Creek channel design were held on October 5 and 6, 2000. Follow-up correspondence responded to individual questions regarding the project and their property.
- Meetings with landowners affected by the Swamp Creek relocation were held on January 25 and 26 2001 to present the current channel design. Issues were identified and follow-up correspondence was mailed to landowners on April 19, 2001 with revised design plans.
- Landowner coordination continued to occur as needed to discuss design plans.

Conclusion

Based on the studies performed for this update to the 1994 REA/FONSI, no substantive changes have occurred since the REA/FONSI was signed. All social, economic and environmental impacts resulting from the roadway and Swamp Creek design changes have been evaluated and no information was revealed that changes the earlier determination that the project will not have any significant impact on the human environment. All other aspects of the Reevaluated Environmental Assessment and FONSI remain unchanged.

This is to request the Federal Highway Administration's (FHWA) concurrence that a supplemental EA for the referenced project will not be necessary. MDT has found that in accordance with 23 CFR 771.119, this action will neither individually or cumulatively, have any significant environmental impacts.

Concurrence:



Jean A. Riley, P. E.
Bureau Chief
Environmental Services

Date 12/18/01



Federal Highway Administration

Date 12/20/01

"ALTERNATIVE ACCESSIBLE FORMATS OF THIS DOCUMENT WILL BE PROVIDED ON REQUEST."

JMM:JAR:SMK

Attachments

cc: Loran E Frazier, P.E. - Missoula District Administrator
Carl S. Peil, P.E. - Preconstruction Engineer
John Horton - Right-of-Way Bureau Chief
Dick Henderson - Right-of-Way, (3 copies)
David W. Jensen, Supervisor - Fiscal Programming Section
Mark A. Wissinger, P.E., Supervisor - Contract Plans Section
Joel M. Marshik, P.E., Manager - Environmental Services
Susan Kilcrease, Civil Engineer Specialist - Environmental Services
Bob Castenata, Forest Supervisor, Kootenai National Forest
Glenn Phillips, MT Department of Fish Wildlife and Parks, (2 copies)
Allan Steinle, Army Corp of Engineers
Dale Paulson, FHWA

APPENDIX A

MONTANA DIVISION

"NATIONWIDE" SECTION 4(f) EVALUATION FOR MINOR IMPACTS
ON
HISTORIC SITES
EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # NH 1-1 (29) 45 F (Control No. 1027) Date: March 9, 2001
 Project Name: Swamp Creek-East Location: Lincoln County
 Site: 24LN1817 J. Neils Logging Co. Swamp Creek Line railroad grade

**NOTE: Any response in a box requires additional information.
 Consult the "Nationwide" Section 4(f) Evaluation criteria.**

- | | <u>YES</u> | <u>NO</u> |
|--|-------------------------------------|--------------------------|
| 1. Is the 4(f) site adjacent to the existing highway? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the proposed project require the removal or alteration of historic structures, and/or objects? | - | - |
| | <input checked="" type="checkbox"/> | - |

The reconstruction of Cowell and Swamp Creeks between road Stationing 57+80 to 66+20 may impact the railroad grade line. The railroad grade line is currently and has in the past been used by the owner, Plum Creek Timber Co. as a two-track trail. Proposed meander locations of Swamp Creek reconstruction may be located near the railroad grade line.

- | | | |
|--|-------------------------------------|-------------------------------------|
| 3. Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Is the impact on the 4(f) site considered minor (i.e.: no effect; or no adverse effect)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

No additional coordination was determined to be necessary due to the Historic Preservation Plan for railroads which was developed in 1989 as a condition of the Programmatic Agreement (PA) between Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and the MDT.

- | | | |
|---|-------------------------------------|-------------------------------------|
| 6. Is the proposed action under an <u>Environmental Impact Statement (E.I.S.)</u> ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Is the proposed project on a new location? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. The Scope-of-Work for the proposed project is one of the following: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a) Improved traffic operation; | | |
| b) Safety improvements; | | |
| c) 3R; | | |
| d) Bridge replacement on essentially the same alignment; or | | |
| e) Addition of lanes. | | |

NOTE: Any response in a box requires additional information.
Consult the "Nationwide" Section 4(f) Evaluation criteria.

YES NO

ALTERNATIVES CONSIDERED

1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent.

X

The No Action alternative for the US Hwy 2 project does not meet purpose and need to correct the deficient geometric conditions of the roadway and may result in an increased crash rate for the project corridor.

ALTERNATIVES CONSIDERED (conclusion:)

2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.

X

The US Hwy 2 alignment in this section has been shifted to the east slightly to improve the substandard curve geometry. The Section 4(f) impact occurs due to the reconstruction of Swamp and Cowell Creeks as the proposed meanders come close to the railroad grade. The creek meanders have been designed to increase stream length and provide the necessary capacity and floodplain for the hydrology. Shortening of the meanders would result in deficient hydrologic capacity and would affect downstream reaches of Swamp Creek and not meet the requirements of resource permitting agencies.

3. An **ALTERNATIVE** on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.

X

The typical section includes widening the shoulders to NHS standards. The highway is offset slightly to the east of its existing alignment in this section. The highway was not proposed to be shifted to the west due to the terrain in this location being fairly steep and the road construction would impact much of the hillside.

Another off-alignment alternative developed and evaluated for US Highway 2 in this location proposed to place the highway on the J. Neils Company logging grade. This may have improved the highway geometry, but was not evaluated in more detail due to its greater impacts. This alternative not only impacted the Section 4(f) resource considerably more, but impacted the Swamp and Cowell Creek drainages more as well.

Descriptions of **ALTERNATIVES 2.** and **3.** are attached.
Descriptions are detailed above.

X

MINIMIZATION OF HARM

- 1. The proposed project includes all possible planning to minimize harm. X
- 2. Measures to minimize harm include the following:

MDT will be purchasing the property where reconstruction of Swamp and Cowell Creeks are located from Plum Creek Timber Co., including the property where this segment of the J. Neils Logging Co. Swamp Creek line grade is located. Meander locations can be fine-tuned in the field after initial staking to avoid or minimize impact to the Section 4(f) resource.

COORDINATION

- 1. The proposed project has been **COORDINATED** with the following:
 - a) SHPO (date: Dec. 7, 2000) X
 - b) ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP) X

No additional coordination was determined to be necessary due to the Historic Preservation Plan for railroads which was developed in 1989 as a condition of a Programmatic Agreement (PA) between Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and the MDT.

- c) Property owner (date: January 25, 2001) X

The property owner has been contacted as part of the landowner coordination process.
- d) Local/State/Federal agencies X

List: SHPO, USFWS, USFS, USACE, MFWP, FHWA, MDEQ

- 2. None, of the preceding had comment(s) regarding this proposed project, and/or the historical properties mitigation.

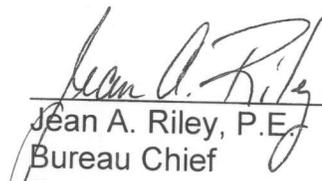
Coordination with the resource agencies is occurring regarding consultation for the ESA listed bull trout and for permitting purposes.

SUMMARY

All required **ALTERNATIVES** have been evaluated and the proposed project meets all the criteria included in the "Nationwide Programmatic" *Section 4(f)* evaluation approved on December 23, 1986. This Programmatic Evaluation includes all possible planning to minimize harm, which will be incorporated in this proposed project.

APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.



Jean A. Riley, P.E.
Bureau Chief
Environmental Services

Date: 12/18/01

Approved: 

Federal Highway Administration

Date: 12/20/01

MONTANA DIVISION

"NATIONWIDE" SECTION 4(f) EVALUATION FOR MINOR IMPACTS
ON
HISTORIC SITES
EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # NH 1-1 (29) 45 F (Control No. 1027)

Date: October 15, 2001

Project Name: Swamp Creek-East

Location: Lincoln County

Site: 24LN1818 US Highway 2

**NOTE: Any response in a box requires additional information.
Consult the "Nationwide" Section 4(f) Evaluation criteria.**

- | | <u>YES</u> | <u>NO</u> |
|--|-------------------------------------|-------------------------------------|
| 1. Is the 4(f) site adjacent to the existing highway?
<i>The site has been identified as US Highway 2, itself.</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the proposed project require the removal or alteration of historic structures, and/or objects?
<i>US Highway 2 will be reconstructed as part of the proposed improvements to include wider shoulders and improve substandard geometrics. The historical corridor of US Hwy 2 will remain the route for the reconstructed highway.</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Is the impact on the 4(f) site considered minor (i.e.: no effect; or no adverse effect)?

<i>US Highway 2 (24LN1818) is covered by a Programmatic Agreement between FHWA, ACHP, SHPO, and MDT. The programmatic Agreement stipulates that no Determination of Eligibility is required for Section 106 purposes. This proposed project will not change existing use of the US Highway 2.</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the proposed action under an <u>Environmental Impact Statement (E.I.S.)</u> ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Is the proposed project on a new location?
<i>Portions of the reconstruction will be offset from the existing alignment to improve roadway geometrics or avoid private landowner properties. For the most part, the proposed improvements are within the existing alignment.</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. The Scope-of-Work for the proposed project is one of the following: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a) Improved traffic operation; | | |
| b) Safety improvements; | | |
| c) 3R; | | |
| d) Bridge replacement on essentially the same alignment; or | | |
| e) Addition of lanes. | | |

NOTE: Any response in a box requires additional information.
Consult the "Nationwide" Section 4(f) Evaluation criteria.

ALTERNATIVES CONSIDERED

YES NO

1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent.

X

The No Action alternative for the US Hwy 2 project does not meet purpose and need to correct the deficient geometric conditions of the roadway and may result in an increased crash rate for the project corridor.

ALTERNATIVES CONSIDERED (conclusion:)

2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any 4(f) impacts, and is also not considered to be feasible and prudent.

X

Since the project involves reconstruction of US Highway 2 and this is the Section 4(f) property, it is not feasible to entirely avoid using this property. For this reason, this alternative was not considered feasible or prudent.

3. An **ALTERNATIVE** on a new location avoiding the 4(f) site has been evaluated, and is not considered to be feasible and prudent.

X

Several off-alignment alternatives were developed and evaluated. The alternatives would partially avoid impact to the Section 4(f) properties. However, US Highway 2 in its current location is constrained by the natural topography and terrain of the study area. Building an off-alignment alternative would result in excessive environmental impacts including but not limited to: right-of-way and relocation impacts, visual impacts, wildlife and fishery impacts, and an increase in impact to National Forest System lands. In addition, construction costs for an off-alignment alternative would be substantially greater. For all of these reasons, an off-alignment alternative was not considered prudent or feasible.

Descriptions of **ALTERNATIVES 2.** and **3.** are attached.
Descriptions are detailed above.

X

MINIMIZATION OF HARM

1. The proposed project includes all possible planning to minimize harm.
2. Measures to minimize harm include the following:

X

Side slopes have been reduced in many locations to reduce Right-of-way and wetland impacts. The reduced typical section will retain some of the historical character of the resource.

COORDINATION

1. The proposed project has been **COORDINATED** with the following:

- a) SHPO (date: Dec. 7, 2000)
b) ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)

X
X

A Historic Preservation Plan for roads and bridges was developed in 1989 as a condition of a Programmatic Agreement (PA) between Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), the State Historic Preservation Office (SHPO) and the MDT. The purpose of the PA is to eliminate the need for evaluating, assessing and mitigating effects to individual segments of roads.

c) Property owner (date:) X

MDT is the property owner of the Section 4(f) property.

d) Local/State/Federal agencies X
List: SHPO, USFWS, USFS, USACE, MFWP, MDEQ

2. None, of the preceding had comment(s) regarding this proposed project, and/or the historical properties mitigation.

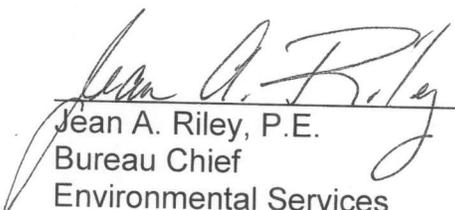
Coordination with the resource agencies is occurring regarding consultation for the ESA listed bull trout and for permitting purposes.

SUMMARY

All required **ALTERNATIVES** have been evaluated and the proposed project meets all the criteria included in the "Nationwide Programmatic" *Section 4(f)* evaluation approved on December 23, 1986. This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in this proposed project.

APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.



Jean A. Riley, P.E.
Bureau Chief
Environmental Services

Date: 12/18/01

Approved: 

Federal Highway Administration

Date: 12/20/01

APPENDIX B



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

5115 Highway 93 South
Missoula, MT
59801-9725

Troy Halouska
Carter & Burgess
216 16th St. Mall, Suite 1700
Denver, CO 80202

November 21, 2000

Re: Swamp Creek - East Re-evaluated Environmental Assessment

Dear Troy,

The NRCS does not have detailed soil survey information for most of Lincoln County, Montana, including the area covered by the above project. We have included parts of Lincoln County in the Sanders County soil survey, along the Bull River and east of your project area near Happy's Inn.

The Soil Survey of Kootenai National Forest Area does cover your project area; however, the level of mapping is too broad to make prime farmland designations. There are undoubtedly soils in Lincoln County that would be considered prime farmland or farmland of statewide importance. We will not be able to make county-wide farmland designations until the detailed soil survey is completed. On-site investigations would be necessary for determinations on any given site.

Enclosed are copies of the soil maps east of your project and the preliminary farmland designation list for Sanders and Parts of Lincoln and Flathead Counties, Montana Soil Survey. I have highlighted soil map units that are prime farmland or statewide importance. You can see from these maps there are some prime or statewide soils in the general area of your project.

If you have any questions related to this information you may contact me at 406 829-3395, extension 3.


Neal Svendsen
Resource Soil Scientist

Enclosures



Consultants in Planning, Engineering, Architecture,
Construction Management, and Related Services

October 30, 2000

Mr. Neil Svendson
USDA NRCS
5115 Hwy 93 South
Missoula, MT 59804

RE: Swamp Creek – East Re-evaluated Environmental Assessment

Dear Mr. Svendson

Carter & Burgess is providing environmental consulting services for a transportation improvement project on U.S. Highway 2 east of Libby, Montana. We are currently compiling the necessary documentation and coordination to prepare a Re-evaluated Environmental Assessment for the project. The project area is in Lincoln County and begins at Milepost 44.8 on U.S. 2 about 12.3 miles southeast of Libby. The project continues southeasterly for 12.3 miles to Milepost 57.1 (see enclosed map).

Previous coordination with the NRCS in 1993 indicated that there are no soils designated as Prime or Unique Farmland and/or deemed to be of State or Local Importance in Lincoln County. Could you please send me a letter that confirms this information? If this information is not correct, and there are soils designated as Prime or Unique Farmland or Farmland of State or Local Importance, could you please send me a copy of the soil survey maps in the general vicinity of the project that show the location of these soils?

The correspondence can be sent to the following address:

Carter & Burgess
216 16th Street, Suite 1700
Denver, CO 80202
Attn: Troy Halouska

If there is someone different that I need to contact to verify this information, or if you have any questions or need further information, please call me at (303) 820-4898.

Sincerely,

Troy Halouska
Environmental Planner

Enclosure

cc: File #977059.303.1.0001



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Marc Racicot, Governor

November 27, 2000

Mark Baumler
State Historic Preservation Office
Montana Historical Society
1410 East 8th Avenue
P.O. Box 201202
Helena, MT 59620

Subject: **Swamp Creek East
NH 1-1(29) 45 F
Control Number 1027**

**CONCUR
MONTANA SHPO**

DATE Dec 2000 SIGNED Jeff W. White

Dear Mark,

Enclosed for your review and comment is a cultural resource inventory report pertaining to the above Montana Department of Transportation (MDT) project. The enclosed report documents the cultural resource inventory conducted by Steve Aaberg for changes to the channel of Swamp Creek that are proposed under the auspices of the Swamp Creek East project.

Several new sites were recorded as a result of this inventory. Two historic sites, 24LN1814 and 24LN1816, are considered not eligible for the National Register of Historic Places. A third site, consisting of a few fragments of heat-altered rock was tested and found not to contain significant materials. It too is not considered eligible for the National Register. Lastly, two additional properties, 24LN1817 and 24LN1818 fall under one of MDT's Programmatic Agreements, and were not evaluated for significance.

If you have any questions or comments about the report, please contact me at 444-045 or splatt@state.mt.us.

Steve Platt, Archaeologist
Environmental Services

Cc: Gordon Stockstad, Chief, Resources & Permitting
Becky Timmons, KNF
Mark White, KNF

3-28-94cc

DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCES

Solid and Hazardous Waste Bureau
Underground Storage Tank Section

MARC RACICOT, GOVERNOR (406) 444-5970



STATE OF MONTANA

FAX # (406) 444-1499

OFFICE 536 Front Street
LOCATION Helena, Montana

MAILING Cogswell Building
ADDRESS: Helena, MT 59620

March 28, 1994

Mr. Dan Waylett
113 Yorkwood Lane
Yorktown, VA 23692

Subject: No Further Corrective Action Required For Petroleum release at Waylett Property,
Highway 2 South, 23 miles south of Libby, MT; Facility ID# 27-12801

Dear Mr. Waylett:

The Montana Department of Health and Environmental Sciences (MDHES) Underground Storage Tank Program has reviewed information associated with a petroleum release at the above-referenced location. Based on the available information, it appears that the corrective action was proper and that no further investigation or cleanup activities are needed. You may still be responsible for any damages not yet identified resulting from leaks, spills, or improper closure of the tank(s).

The decision that no further corrective action is required is based on the findings of two investigations by Chen-Northern which indicate that the contamination which remains is minor and is confined to the former tank basin. The decision is also based on analytical results of samples collected from the domestic water supply well on site. The samples did not contain volatile organic compounds above the detection limit of the analyses.

The MDHES has removed your "leak file" from active status in the filing system. We will keep your file in a separate "resolved" section, so that if you need any information in the future or new problems with your site arise, then we can access the information easily.

If you have any questions concerning this letter please contact this office at (406) 444-5970. We appreciate your cooperation concerning corrective action requirements.

Sincerely,

Daryl Reed
Environmental Specialist
dsr.430

cc: Petroleum Tank Release Compensation Board
Ron Anderson, Lincoln County Sanitarian, 418 Mineral Ave., Libby, MT 59923
David Jacobson, Chen-Northern, 1610 B Street, PO Box 4699, Helena, MT 59604
Facility file

7-7-95

DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Corrective Action Program
Polson Regional Field Office
(406) 883-4892

FAX # (406) 444-1902



STATE OF MONTANA

OFFICE LOCATION: 2209 PHOENIX AVE. HELENA, MONTANA

MAILING ADDRESS: PO BOX 240801 HELENA, MT 59620-0801

September 6, 1995

Mr. Stan Sternberg
 Montana Department of Transportation
 2701 Prospect Avenue
 Helena, MT 59620

Post-It® Fax Note	7671	Date	9-16-95	# of Pages	1
To	Worsham	From	Worsham		
Co./Dept	DEQ/REM	Co.	DEQ/REM		
Phone #		Phone #			
Fax #	406-755-8977	Fax #			

Subject: No Further Corrective Action Required For Petroleum release at the Coursien Site, MDT Swamp Creek-East, Libby; Facility ID# 27-13112 (Leak #1594)

Dear Mr. Sternberg:

The Montana Department of Environmental Quality (MDEQ) Underground Storage Tank Program has reviewed information associated with a petroleum release at the above-referenced location. Based on the available information, it appears that the corrective action was proper and that no further investigation or cleanup activities are needed. You may still be responsible for any damages not yet identified resulting from leaks, spills, or improper closure of the tank(s).

The decision that no further corrective action is required is based on information and recommendations provided by Maxim Technologies, Inc. (formerly Huntingdon) in the April 1995 Annual Groundwater Monitoring report. The report documents that BTEX levels have dropped below DEQ action levels in all wells sampled. To complete work at this site, please have your consultant submit a work plan and cost estimate for well abandonment and site restoration.

The MDEQ has removed your "leak file" from active status in the filing system. We will keep your file in a separate "resolved" section, so that if you need any information in the future or new problems with your site arise, then we can access the information easily.

If you have any questions concerning this letter please contact this office at (406) 883-4892 or the Helena office at (406) 444-5970. We appreciate your cooperation concerning corrective action requirements.

Sincerely,

 FOR

Catherine McDonald
 Environmental Specialist
 eml.148

cc: Paul Hicks, PTRCB
 Facility file
 Aaron Spawman, Maxim Technologies, Inc., Box 4699, Helena, MT 59604
 Lincoln County Sanitarian; P.O. Box 418, Mineral Ave, Libby, MT 59923

AN EQUAL OPPORTUNITY EMPLOYER

DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCESUnderground Storage Tank Program
(406) 444-5970

STAN STEPHENS, GOVERNOR

FAX #(406) 444-1488



STATE OF MONTANA

OFFICE 836 Front Street
LOCATION: Helena, MontanaMAILING Cogswell Building
ADDRESS: Helena, MT 59620

November 23, 1992

Mr. Tom Hansen
Montana Department of Fish, Wildlife & Parks
1420 E. Sixth Ave.
Helena, MT 59620

Re: No Further Corrective Action Required For Petroleum release at
Libby Creek Field Station (Facility # 27-12650)

Dear Mr. Hansen :

The Montana Department of Health and Environmental Sciences (MDHES) Underground Storage Tank Program has reviewed information associated with a petroleum release at the above-referenced location. Based on the available information, it appears that the corrective action was proper and that no further investigation or cleanup activities are needed. You may still be responsible for any damages not yet identified resulting from leaks, spills, or improper closure of the tank.

Although the initial closure sample analyses showed 1100 and 2.7 ppm TPH as gasoline (EPA 8015 modified) in soil directly below the east and west end of the tank respectively, the decision that no further corrective action is required is based on the following:

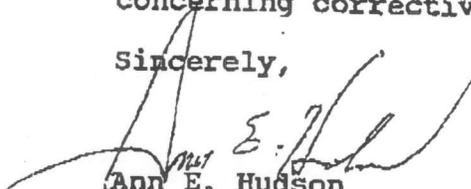
- The hydrocarbon profile of the above referenced closure samples were not consistent with gasoline. The chromatogram for the sample from the east end of the tank (1100 ppm TPH) indicated that the contaminant is more likely diesel fuel.
- MDHES personnel noted no soil discoloration, sheen or detectible hydrocarbon odor during the September 24th re-excavation of the former tank location. A heated head-space analysis on a soil sample collected at the air/water interface indicated only 20 ppm TPH with the HNU.
- The soil sample collected at groundwater (11.5 ft.) on September 24, 1992 by MDHES personnel revealed no detectible hydrocarbons as analyzed by TPH as diesel (EPA method 8015 modified).
- Although hydrocarbon contamination may be present between the former tank location and groundwater, the levels are likely minimal as evidenced by the lack of positive visual or olfactory indications.

Mr. Tom Hansen
Facility # 27-12650
November 23, 1992
Page 2

The MDHES has removed your "leak file" from active status in the filing system. We will keep your file in a separate "resolved" section, so that if you need any information in the future or new problems with your site arise, then we can access the information easily.

If you have any questions concerning this letter please contact this office at (406) 444-5970. We appreciate your cooperation concerning corrective action requirements.

Sincerely,



Ann E. Hudson
Environmental Specialist
AH.106

cc: Jean Riley, Executive Director, PTRCB
Facility file
John Peterson, Lincoln County Sanitarian, 418 Mineral Avenue,
Libby, MT 59923



U.S. Department
of Transportation
**Federal Highway
Administration**

Montana Division
2880 Skyway Drive
Helena, Montana 59602

March 8, 2001

R. Mark Wilson, Field Supervisor
Montana Field Office
U.S. Department of Interior
Fish and Wildlife Service (USFWS)
100 N. Park, Suite 320
Helena, MT 59601

Subject: NH 1-1(29)45 F
Swamp Creek-East
Control No. 1027

Dear Mr. Wilson:

This is a request from the Federal Highway Administration (FHWA), on behalf of the Montana Department of Transportation (MDT), to initiate formal consultation with the U.S. Fish and Wildlife Service (USFWS) regarding the Swamp Creek-East road reconstruction project. The project is located along U.S. Highway 2 from MP 44.8 to MP 57.1 (12.3 mi; 19.3 km) in Lincoln County, Montana (See attached project location map). The proposed project involves Forest Service lands administered by the Kootenai National Forest, Canoe Gulch Ranger District. In accordance with 50 CFR 402.14 (c), a copy of the draft Biological Resources Report (BRR), which contains the final Biological Assessment (BA) prepared for this project, is attached. The Biological Resources Report will be finalized when the final wetland impact quantities are received. All pertinent information regarding project description, description of the project area, and listed species affected are contained within the BRR.

Listed Species Affected by the Proposed Action

A comprehensive Biological Resources Report dated March 2, 2001, contains a BA that deals exclusively with species given protection under Section 7 of the Endangered Species Act. Listed or proposed species that could occur in the general project vicinity are as follows:

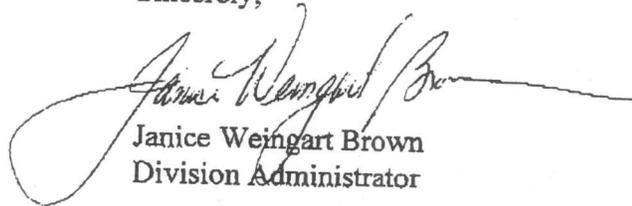
White Sturgeon: (*Acipenser transmontanus*)
Bald Eagle: (*Haliaeetus leucocephalus*)
Grizzly Bear: (*Ursus arctos horribilis*)
Gray Wolf: (*Canis lupus*)
Canada Lynx: (*Lynx canadensis*)
Bull Trout: (*Salvelinus confluentus*)

It has been determined that the proposed project would have "**no effect**" on the *White Sturgeon*. The proposed project may affect, but is "**not likely to adversely affect**" the *Grizzly Bear*, *Gray Wolf*, *Canada Lynx* and *Bald Eagle*, while a determination of "**likely to adversely affect**" has been made with regards to the listed *Bull Trout*. Please note the listed potential effects upon *Bull Trout* in Section 4.5.2.3. The conservation and coordination measures are listed in Section 4.5.4. The determination of effect is listed in Section 4.6.

At this time we would like to request the Service enter into **formal consultation** in order to assess the practicality and completeness of the recommendations made in the BA with regards to the listed *Bull trout*.

Please review the Biological Assessment portion of the Biological Resources Report and advise us if any additional information is needed by the USFWS. If you have any questions, please call John Snyder, Operations Engineer, at 449-5302 ext. 233.

Sincerely,



Janice Weingart Brown
Division Administrator

Enclosure

cc: Loran Frazier, P.E., Administrator, MDT Missoula District
Steve Criswell, P.E., MDT Consultant Design
Carl S. Peil, P.E., MDT Preconstruction Engineer
Joel M. Marshik, P.E., Manager, MDT Environmental Services
Alan Steinle, U.S. Army Corps of Engineers (Helena)
Jeff Ryan, Department of Environmental Quality (Helena)
Glenn Phillips, Department of Fish, Wildlife and Parks (Helena)
Tom Grabinski, Kootenai National Forest (Libby)
Diana Bell, Carter Burgess

File: Project js/lr



United States
Department of
Agriculture

Forest
Service

Libby
Ranger
District

12557 Highway 37
Libby, MT 59923

File Code: 2600 Wildlife

Date: December 20, 2000

Rhett Good & David Young
Western Ecosystems Technology, Inc.
2003 Central Ave.
Cheyenne, WY 82001

Rhett and David:

This letter is in response to your request for wildlife resource information for the Swamp Creek reconstruction segment of U.S. Highway 2. Please also refer to the enclosed maps detailing wildlife sighting locations and wildlife habitats. All sightings in the following narrative are as measured from approximately midpoint in the project area, in section 35, Township 28 North, Range 30 West. Where information specifies milepost locations, it is with regard to current mileposts posted for Highway 2.

Kootenai National Forest Management Direction

Management direction for Kootenai National Forest (NF) lands is outlined in the Kootenai National Forest Land and Resource Management Plan, (Forest Plan) 1987. This plan identifies Management Areas (MA's), and the management direction for each MA. I have included maps (see map #1) at 1/2"/mile and 2.64"/mile scale showing the MA's for forest lands adjacent to the Swamp Creek highway segment. Also included is a brief description of the management direction for each MA (see enclosure #1). In general, forest lands to the east of Highway 2 are winter range/timber allocations for big game (MA's 10 and 11); and those to the west are timber/viewing allocations (MA's 16 and 17). Designated old growth (MA 13) also occurs adjacent to the highway on both the east and west sides.

Listed Threatened, Endangered, and Proposed Species

Threatened, endangered, and proposed species are managed under the authority of the Endangered Species Act (P.L. 93-205, as amended), and the National Forest Management Act (P.L. 94-588). The Endangered Species Act (ESA) requires federal agencies to ensure that all actions which they "authorize, fund, or carry out" are not likely to jeopardize the continued existence of any threatened, endangered, or proposed species. Agencies are further required to develop and carry out conservation programs for these species. The following species are currently federally listed within the Kootenai NF as endangered, threatened, or proposed species under the ESA.

Bald Eagle – Portions of the project area are located within a mapped and agreed to *Bald Eagle Consultation Area* as shown on the enclosed map (see map #2). This area approximates primary habitat for bald eagles in the Kootenai NF in agreement with the U.S. Fish & Wildlife Service (USFWS). The mapping is based on known eagle use; and potential habitat within 1 mile of suitable larger water bodies. The nearest known nest site is located approximately 13 miles east-



exceedingly rare in the Kootenai NF. Re-introduction efforts in the 1980's have been largely unsuccessful in the southern half of the Cabinet Mountains due to high natural mortality. District sightings are limited to the one location shown on the enclosed map (see map #4). This species could potentially occur throughout forested riparian habitats. Libby RD conducts no specific animal surveys for this species.

Wolverine – This species occurs throughout backcountry areas of the Kootenai NF, including the Cabinet Mountains west of the project area. Summer habitat preference includes high-elevation, subalpine fir cirque basins and rock talus; winter habitats can include lower elevation winter ranges where carrion may be available. Libby RD sightings are shown on the enclosed map (see map #4). Habitat and sightings near the project area would likely be consistent with either winter habitat use; or juvenile migration. Surveys for this species are limited to one, early spring aerial survey of the Cabinet Mountains.

Northern Bog Lemming – This species is associated with sphagnum bog habitats and occurs in several locations in the Kootenai NF based on surveys in conjunction with the Montana Natural Heritage Program. One population is known to occur in Libby RD, approximately 15 miles northeast of the project area.

Townsend's Big-eared Bat – This species was detected on 17 sites in the Kootenai NF based on 1994 surveys with the Montana Natural Heritage Program, including 3 sites in Libby RD. The nearest detections to the project area were within 1/2 mile west of the project area in the West Fisher drainage in the NE 1/4, section 31, T27N, R29W; and approximately 5 miles southwest of the project area near Howard Lake in Section 13, T27N, R29W. Sampling sites for this species are typically water sources which bats frequent prior to nightly feeding.

Peregrine Falcon – Peregrine sightings are very limited in the Kootenai NF. Records include a historic nest near Lucky Point in the Yaak Ranger District; and a historic sighting near Dome Mountain (20 miles NNW of the project area) in the Cabinet Mountains in 1983. Recent sightings have been received along the Kootenai River near the town of Libby (18 miles north of the project area) and along the Clark Fork River. Libby RD has no sightings (historic or current) within 10 airmiles of the specific project area.

Goshawk – Goshawks can be expected to occur, and have been commonly observed throughout a wide range of habitats in the Kootenai NF. Current sightings for Libby RD are displayed on the enclosed map (see map #4); although goshawk occurrence is undoubtedly more widespread than would be indicated by the limited sightings shown on the map. The District has done few surveys for this species; no surveys have been done in the vicinity of the project area. Goshawks can be expected to occur in mature timbered habitats adjacent to the project area.

Flammulated Owl – Flammulated owls are known to occur extensively throughout drier ponderosa pine, Douglas fir, and mixed species forests of the Kootenai NF and Libby RD. These habitats occur on both sides of the immediate project area, and numerous occurrences for this species are displayed on the enclosed map (see map #4). The majority of these occurrences are based on vocalizations received in response to recorded owl calls during spring surveys.

Common Loon – Common loons occur throughout the Kootenai NF and Libby RD on suitable lakes. Double N Lake is the nearest occupied habitat with a record of successful reproduction.

Big Game

Big game species in the project area include Rocky Mountain elk, Shiras moose, mule and white-tailed deer, mountain lion, and black bear. Highway 2 forms somewhat of a north/south dividing line of habitat for these species, with habitats to the west of the highway being primarily summer and fall range; and habitats to the east being predominantly winter and spring range. The Fisher River corridor and bottom (from the Fisher River bridge approximate milepost 57.1 north to the East Fisher Road, approximate milepost 55.5) has the highest year-round use by big game; and the greatest potential for vehicle collisions with moose, elk, and black bear. Collisions are minimized somewhat by the long straight away, which allows early warning and good reaction time; but vehicle/animal encounters with these species have occurred in this stretch. Potential for deer collisions is probably highest where fields and grasslands are adjacent to the highway; deer are commonly observed using these habitats throughout the spring. Elk also cross the highway seasonally in the spring and fall as they migrate between summer and winter range. To my knowledge, the primary areas of these crossings are from Schreiber Creek Road (milepost 52.6) south to Swamp Creek Guard Station (milepost 53); and on the hill south of Snyder's field (from milepost 54 south to milepost 55), although other crossings may exist. Black bear may use large cottonwoods in the Fisher River bottom for denning; and are probably attracted to and use the garbage dumpsters adjacent to the highway near milemarker 47.1, which are maintained by Lincoln County.

Old Growth Habitat

The Kootenai Forest Plan identifies specific areas (MA 13) which are managed for old growth forest and associated wildlife species. Several of these allocations are immediately adjacent to the highway, and a slight loss of old growth habitat acreage could potentially occur dependent upon clearing limits with the reconstruction. The small potential old growth losses which could occur would not result in unacceptable or substantial impact.

/s/ Gary Altman

Gary Altman
Wildlife Biologist
Libby Ranger District, Kootenai NF

Enclosures

**Montana Department
of
Fish, Wildlife & Parks**



Mike E. Hensler MFWP
475 Fish Hatchery RD
Libby, MT 59923
(406) 293-4161
FAX 293-2235
Ref: MH55.01
June 1, 2001

Carter Burgess (attn: Diana Bell)
216 Sixteen Street Mall Suite 1700
Denver, CO 80202-5131

SUBJECT: Swamp Creek East comments

Dear Diana;

Thank you for returning the discussion summary back so promptly. I have talked with Ken Chrest in Helena, he said that MDT should incorporate the suggested changes into the final design plan and submit them to both of us. Please highlight the proposed changes from the preliminary to final design plan. Call me if you have any questions.

Sincerely,

Mike E. Hensler
Fisheries Management Biologist

/meh