

**BNSF GRIZZLY BEAR HABITAT CONSERVATION PLAN**

**NATIONAL ENVIRONMENTAL POLICY ACT LOW EFFECT SCREENING FORM**

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2.0 Does the HCP fit the following Department of Interior and Fish and Wildlife Service categorical-exclusion criteria? The answer must be “yes” to all three questions below for a positive determination. Each response should include an explanation. If the answer is “no” to

any question, the action cannot be categorically excluded, and an Environmental Assessment or an Environmental Impact Statement must be prepared. ....9

A. Are the effects of the HCP minor or negligible on federally listed, proposed, or candidate species and their habitats covered under the HCP? [516 DM 8.5(C)(2); HCP Handbook] Consider the degree or amount of take and the impact of that take on the species. Although take may occur under project implementation, after the minimization and mitigation measures proposed in the HCP are done, the impacts must be so minor as to result in negligible effects to the species (516 DM 8).....9

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3.0 Do any of the exceptions to categorical exclusions (extraordinary circumstances) listed in 43 CFR 46.215 apply to this HCP? If the answer is “yes” to any of the questions below, the permit action cannot be categorically excluded from additional NEPA analysis, and an Environmental Assessment or an Environmental Impact Statement must be prepared. Each “no” response should include an explanation. .... 14

A. Would implementation of the HCP have significant impacts on public health or safety? ..... 14

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landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990) or floodplains (Executive Order 11988); national monuments; migratory birds, eagles, or other ecologically significant or critical resources?..... 15

Park, recreation, or refuge lands..... 15

Wilderness areas ..... 15

Wild or scenic rivers..... 15

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I. Would implementation of the HCP violate a Federal law, or a State, local, or tribal law, or a requirement imposed for the protection of the environment..... 18

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**SCREENING FORM  
LOW-EFFECT INCIDENTAL TAKE PERMIT DETERMINATION AND  
NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) ENVIRONMENTAL  
ACTION STATEMENT**

**1.0 HCP INFORMATION**

**A. HCP Name:**

BNSF Railway Grizzly Bear HCP

**B. Affected Species:**

Grizzly Bear (*Ursus arctos horribilis*)

**C. HCP Size (in stream miles and/or acres):**

The Permit Area includes 206 miles of railway right-of-way of variable width between Brimstone West, MT and Shelby, MT.

**D. Brief Project Description (including minimization and mitigation plans):**

**HCP Covered Activities**

The HCP covers otherwise lawful railway operations, maintenance and construction activities, and minimization measures (hereafter "BNSF operations") in the railroad right-of-way, including commuter trains operated by Amtrak.

**Permit Duration**

The Permit duration would be 7 years.

**HCP Permit Area**

The Permit Area includes approximately 206 miles of railroad right-of-way between Brimstone West, MT (RR milepost 1253.8) to the west and Shelby, MT (RR milepost 1066) to the east (Figure 1). This area generally incorporates the area of known incidental take of grizzly bears attributed to BNSF operations in Montana and this is the area for which BNSF has requested authorization for incidental take.

**HCP Corridor**

The HCP Corridor is a subset of the Permit Area extending for approximately 160 miles between Cutbank, Montana (RR Milepost 1090.1) to the east and Stryker, Montana (RR Milepost 1249.3) to the

west (Figure 1). The HCP Corridor represents the portion of the HCP Permit Area where the HCP avoidance and minimization measures would be applied. Prior to 2017, no grizzly bear train-strikes within the railroad right-of-way had occurred outside the HCP Corridor.<sup>1</sup> Therefore, while BNSF is seeking incidental take coverage for the extent of incidences of mortality caused by BNSF operations, it would only apply the avoidance and minimization measures in the HCP Corridor where there are records of attractants contributing to grizzly bear train strikes.

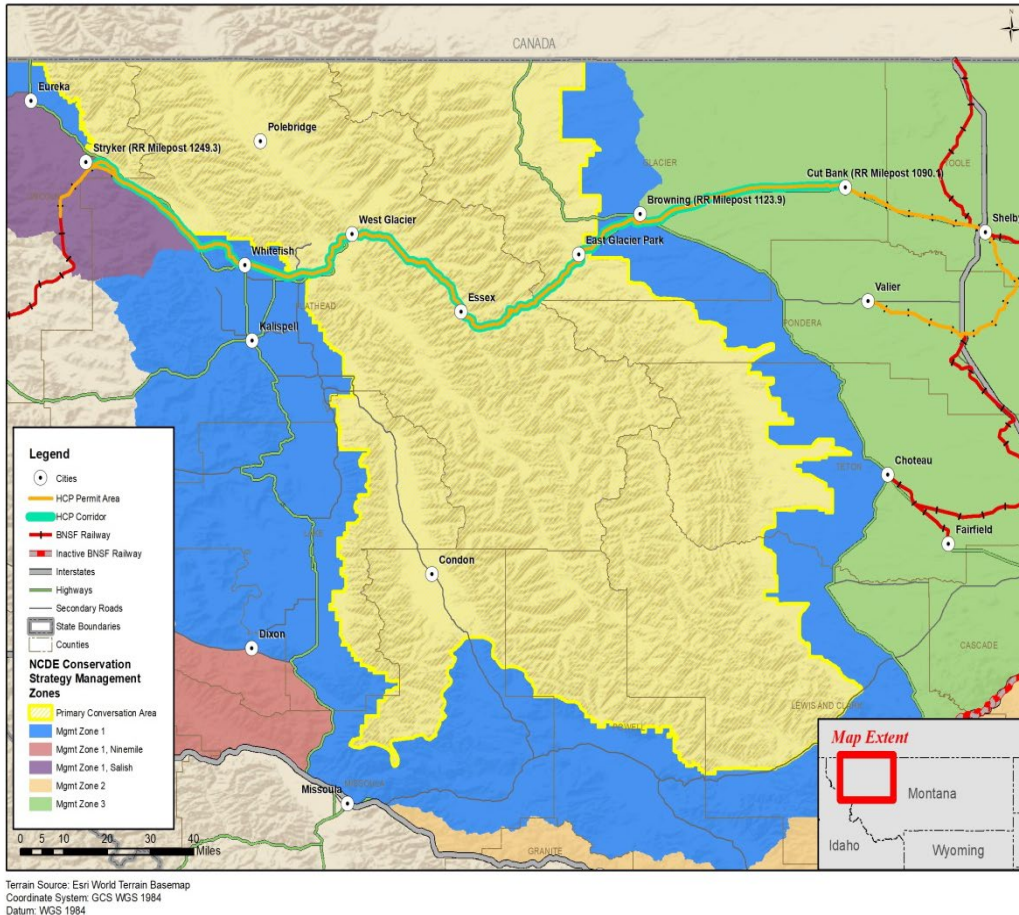


Figure 1. Location and Vicinity of HCP Permit Area, Corridor, and Grizzly Bear Conservation Strategy Management Zones.

**HCP Plan Area**

<sup>1</sup> There was a single grizzly bear strike in 2017 and two grizzly bear strikes in 2019 attributed to BNSF operations outside the HCP corridor. No attractants or other contributing factors were identified at the site of these mortalities. Therefore, the avoidance and minimization measures of the HCP are limited to the HCP corridor where documented record of attractants contributing to grizzly bear being struck by trains.

The Plan area includes the entire Northern Continental Divide Grizzly Bear Ecosystem (NCDE) recovery zone to encompass the Permit Area, the HCP Corridor, and the area where mitigation measures may be implemented. The Plan Area can also be described in terms of the recently issued North Continental Divide Ecosystem Grizzly Bear Conservation Strategy (NCDE Conservation Strategy; NCDE Subcommittee 2019). The goal of the final NCDE Conservation Strategy plan is to maintain a recovered, genetically diverse grizzly bear population throughout the Demographic Monitoring Area (DMA: the Primary Conservation Area [PCA] and management zone 1), while maintaining demographic and genetic connections with Canadian populations and providing the opportunity for connectivity with other ecosystems (CYE, BE, GYE) in management zones 2 and 3.

### **E. HCP Administration and Technical Committee**

In the early 1990's in response to concerns about grizzly bear mortality due to railroad operations in the area between Marias Pass and Whitefish, BNSF entered into an agreement with federal, state, tribal, and local agencies, conservation groups, and industry representatives to form the Great Northern Environmental Stewardship Area (GNESA). Since that time, GNESA has successfully coordinated the efforts between BNSF, federal, state, and tribal agencies to reduce the potential for train-caused mortality and human-caused mortality of grizzly bears in the railway right-of-way. GNESA convened a technical committee whose members varied but which always included at least one representative of the Montana Fish, Wildlife and Parks (MFWP) grizzly bear managers, National Park Service (NPS), Blackfeet Indian Nation, USFS, the Service, and BNSF. This committee worked with BNSF to identify the measures necessary to reduce grizzly bear train strikes; these measures ultimately formed the basis of the proposed HCP.

GNESA has recently been reorganized as an advisory committee within the Montana Outdoor Legacy Foundation (MOLF). MOLF is the foundation arm of Montana Fish, Wildlife and Parks and supports a variety of outdoor experiences, access, wildlife projects, and other non-profit partnerships. The roles and responsibilities of BNSF, the Service, MOLF/GNESA, the Blackfeet Fish & Wildlife Office, Amtrak, and the HCP technical committee are described in the Implementing Agreement (IA) contained in Appendix A of the HCP. Briefly, MOLF/GNESA is expected to serve in an advisory capacity to BNSF and will: administer the HCP compensatory mitigation funds, including reserve funds; support implementation and monitoring of the HCP by preparing annual summaries of data collected by the technical committee, record how the funds were distributed, and report the conflict mitigation actions implemented.

## **F. HCP Biological Goals**

The biological goals of the HCP are to:

1. Promote safety for humans and bears in the Permit Area by reducing attractants and deterring bears from high risk areas to reduce grizzly bear mortality caused by BNSF trains to the maximum extent practicable.
2. Contribute to the recovery of the NCDE grizzly bear population by offsetting unavoidable incidental take through programs to reduce other sources of human-caused mortality within the Plan Area.

## **G. Land and Benefiting Management Activities (including avoidance, minimization and mitigation measures)**

The BNSF Railway HCP includes a conservation strategy aimed at avoiding, minimizing, and mitigating for adverse effects of the covered activities on grizzly bears.

The BNSF Railway HCP avoidance and minimization measures are applied in the HCP Corridor and are designed to: 1) prevent food attractants from being deposited onto or near the railroad tracks or railroad right-of-way, 2) require a quick response to remove food attractants that are deposited in these areas, and 3) discourage bears from entering impact-prone segments of the Permit Area. The compensatory mitigation measures would reduce other human-caused mortalities within the NCDE grizzly bear recovery zone within the Plan Area. The HCP avoidance and minimization measures are described below.

## **H. Avoidance and Minimization**

The avoidance and minimization are summarized below and described in detail in Section 5.0 of the HCP.

### **Reducing Attractants in the HCP Corridor**

The primary focus of the avoidance and minimization efforts is to prevent food attractants from being deposited at or near the railroad tracks and right-of-way, and promptly identifying and removing any food attractant that does end up in these areas. Briefly, the measures include:

#### **Daily track inspections**

BNSF will conduct daily track inspections. When bear attractants - including carrion, refuse, and grain spills – are observed, the train inspector will immediately remove or arrange for a maintenance crew to remove the food source.



**Annual comprehensive sweep**

In the spring, BNSF will conduct a comprehensive sweep of the right-of-way to remove all carrion that has accumulated during the winter and was not exposed during daily inspections.

**Passenger train refuse**

If track inspectors or maintenance crews observe refuse from passenger trains, BNSF will notify the USFWS and work proactively with BNSF Resource Protection and law enforcement, as applicable, to address improper dumping of refuse. Amtrak's obligations with respect to this measure are addressed in the IA.

**Rapid response to train derailment**

In the case of a train derailment, the Rapid Response Protocol will be initiated, which includes coordinating with MOLF/GNESA partners, initiating immediate and comprehensive removal of spilled grain or other spilled food commodities, and implementing measures to deter grizzly bears while the clean-up occurs.

**Grain car inspections**

BNSF will develop and implement a briefing procedure for individuals performing train inspections within the HCP Corridor and at key yards for grain trains entering the HCP Corridor.

**Annual vegetation management**

BNSF will prevent vegetation from growing on the railbed through its annual vegetation management program and in compliance with all governing agencies.

**Revegetation of disturbed areas**

BNSF will only use seed mixes that do not contain plant types known to attract grizzly bears when revegetating right-of-way lands that have been disturbed due to construction, derailments, or other land disturbances.

**Livestock control**

BNSF will continue to evaluate locations where livestock, which are the source of potential carrion, are entering the right-of-way and will work with local ranchers to maintain existing fencing associated with livestock prone areas.

**Maintenance and contractor training regarding sanitation**

BNSF will develop a formal briefing program or handout on the proper storage, handling, and removal of food and garbage for all work crews and contractors working in the HCP Corridor.

**Discouraging Bears from Entering Impact-Prone Areas**

On some portions of the right-of-way, bears have been known to attempt to avoid oncoming trains by running down the track in front of the train rather than running off to one side. This typically happens in places where the track is elevated relative to the adjacent landscape or in steep cuts.

BNSF, in coordination with the Service and the HCP technical committee, will evaluate new technologies for dissuading grizzly bears or other wildlife from entering physically constrained areas of the corridor that could restrict the grizzly bear's or other wildlife's ability to escape an oncoming train. If the data (e.g., bear observations) suggests that new or existing technology should be deployed, the technical committee and BNSF will work together to determine how the technology can be used in a manner that is safe and effective for rail application.

## **I. Compensatory Mitigation Measures**

The HCP identifies compensatory mitigation measures designed to offset the effects of BNSF's incidental take in the Permit Area through the application of conflict mitigation actions to reduce grizzly bear/human conflicts that contribute to human-caused mortalities within the NCDE recovery zone/PCA. These measures are summarized here and described in detail in Section 5.0 of the HCP.

### **BNSF will fund the salaries and operational costs for two MFWP and one Blackfoot Indian Nation grizzly bear technician.**

State and Tribal grizzly bear managers and technicians are responsible for monitoring and managing the grizzly bear population as well as conducting outreach and education of the public to ensure the public feels safe and secure enough to accept coexistence with large, occasionally dangerous, carnivores like grizzly bears. Managers then focus on conflict mitigation actions to reduce grizzly bear/human conflicts that lead to human-caused mortality. Additional funding for the salary and operational costs of technicians will allow more conflict mitigation actions to occur in the communities where the resources are most needed, including public education, implementation of electric fencing programs and waste management programs, trainings on the use of bear spray, deployment of deterrents such as trained dogs, rubber bullets, or bean bags, responding to concerned citizens, and addressing attractants before they become a source of conflict.

### **BNSF will provide funding for radio collars, remote cameras, waste management programs, purchase/installation of electric fencing and livestock fencing, and hunter education.**

Radio-collaring grizzly bears is instrumental to managing them. Collars can be programmed to record locations at intervals of 1 to 4 hours during the non-denning season and can be programmed to take more frequent readings when a grizzly bear comes into proximity of residential areas. This level of information is invaluable for determining the appropriate management response and eliminating the need for unnecessary capture of a grizzly bear. Bear managers deploy remote cameras to monitor potential conflict situations and to monitor bear capture sites. The purchase of additional remote cameras will allow their deployment to more locations to monitor potential conflict sites, evaluate the effectiveness of mitigation actions applied, ensure timely responses to conflicts, and reduce the need to capture and handle bears by preventing conflicts before they occur. Bears are attracted to garbage at individual residences and community refuse disposal sites. Providing "bear-resistant" containers and disposal sites is a proven method to reduce the potential

for bear conflicts (Breck et al. 2006). Funding for waste management will enhance MOLF/GNESA and the grizzly bear managers' ability to cost-share the purchase of bear-resistant containers with homeowners or loan out bear-resistant bins. Ideally, homeowners will become used to using the bins and purchase one such that the income from the sale can be recycled back to purchase more bins. Funding will also allow MOLF/GNESA and grizzly bear managers to work with communities to create bear-resistant disposal sites in the Plan Area, including communities in the Blackfoot Valley, Middle Fork, and Rocky Mountain Front, where grizzly bears are expanding their range. Grizzly bear managers in Montana have effectively used electric fencing to deter bear visits to these and other temporary attractants (Proctor et al. 2018, see also grizzly bear management reports at <http://fwp.mt.gov/regions/r1/>). Region 1, MFWP has an electric fence loaner program and currently has 13 electric fence energizers and net fences on loan to landowners (MFWP 2018). Financing an electric fencing program will allow MOLA/GNESA and grizzly bear managers to conduct electric fencing workshops, implement a cost-share electric fencing program, and/or deploy electric fencing to prevent conflicts that contribute to grizzly bear mortality. Livestock that is hit and killed in the right-of-way becomes carrion that attracts grizzly bears. The HCP technical committee will monitor data related to bear strikes to identify the places where livestock fencing should be built or requires repair. The hunter education programs reduce grizzly bear/human conflicts by training hunters to avoid conflicts (food storage and sanitation), avoid mistaken identity of grizzly bears, and use bear spray in a defense of life situation.

## **J. Changed Circumstances**

The Service and BNSF have identified and planned for the following potential changed circumstances related to the HCP.

### **Change in Status of Grizzly Bears**

The listing status of the grizzly bear may change during the Permit term. If the NCDE population of grizzly bears is de-listed, the Service and BNSF will review the HCP to determine if any of the commitments could be relaxed, removed, or modified.

### **New Listing of a Non-HCP Species**

If a non-HCP species that occurs in the Permit Area and is affected by rail operations becomes a federally listed species, the Service would notify BNSF. Options that might be pursued include:

- Development of a plan to avoid take of the newly listed species,
- Addition of the species to this HCP and Permit through an amendment,
- Application for a separate permit for the newly listed species through the section 10 process.

### **Take of Grizzly Bears Outside the Permit Area**

The NCDE grizzly bear population size is increasing (Kendall et al. 2009, Mace et al. 2012, Costello et al. 2016, Costello 2019, *in litt.*) and its range is expanding (NCDE Subcommittee 2019). Therefore, it is reasonable to assume that over the Permit term, a train strike could result in mortality of grizzly bears outside the Permit Area. In the event this occurs, BNSF and the Service would meet to discuss the conditions under which the strike occurred and determine an appropriate response consistent with the adaptive management provisions below.

### **K. Monitoring and Reporting**

In its annual report prepared by MOLFG/GENESA, BNSF will submit a certification to the Service that its avoidance and minimization measures are being implemented as set out in the HCP to the best of its ability in HCP Corridor.

BNSF will also attend an annual meeting with the Service, MOLFG/GENESA, and the HCP technical committee. The outcomes of that meeting will be summarized by MOLFG/GENESA into a report submitted to BNSF and the Service by March 31, annually. The meeting is an opportunity to review the conflict mitigation actions that have occurred through the funding provided by BNSF, report on overall NCDE mortality trends, identify new or variations in mortality patterns, review train strike incidents, and determine if any commitments required adaptation.

BNSF will coordinate with the HCP technical committee to annually review the circumstances associated with each instance of grizzly bear take incidental to BNSF operations. The purpose of this review is to determine which, if any, of the incidents was avoidable; to consider additional measures which might further minimize the potential for bear-train collisions; and assess whether the number of train-related bear mortalities and specifically the percentage of female grizzly bears lost to train-related mortalities was within the anticipated level of incidental take.

It is not possible to quantitatively determine the precise number of human-caused bear mortalities that will be avoided through implementation of the HCP mitigation program, but deployment of bear management specialists in other areas has led to significant reductions in grizzly bear conflicts and mortality (Proctor et al. 2018). Members of the HCP technical committee will report their prevention, management, and bear monitoring activities funded by the HCP mitigation program. Through its monitoring and reporting, the HCP technical committee will determine the additional field work that was accomplished by the technicians; the additional bear monitoring that was enabled with the collars and cameras; lessons learned from that monitoring; the number of conflict sites that were abated through the BNSF-funded waste management materials and electric fencing program; and the number of additional hunter education classes offered. To the best of its ability, the technical committee will assess the human-bear conflicts addressed by these actions.

BNSF and the HCP technical committee will assess whether the HCP mitigation program is sufficiently offsetting the impacts of its incidental take in the NCDE. If the HCP technical committee recommends changes to the mitigation program, BNSF will coordinate with the Service to determine

which, if any, of those recommendations to adopt into the HCP. At a minimum, BNSF, MOLF/GNESA, MFWP, Amtrak, the Blackfeet Indian Nation, together with other members of the HCP technical committee, will evaluate the effectiveness of the program in year three and may revise the allocation of funds in the fourth year of implementation.

**2.0 DOES THE HCP FIT THE FOLLOWING DEPARTMENT OF INTERIOR AND FISH AND WILDLIFE SERVICE CATEGORICAL-EXCLUSION CRITERIA? THE ANSWER MUST BE “YES” TO ALL THREE QUESTIONS BELOW FOR A POSITIVE DETERMINATION. EACH RESPONSE SHOULD INCLUDE AN EXPLANATION. IF THE ANSWER IS “NO” TO ANY QUESTION, THE ACTION CANNOT BE CATEGORICALLY EXCLUDED, AND AN ENVIRONMENTAL ASSESSMENT OR AN ENVIRONMENTAL IMPACT STATEMENT MUST BE PREPARED.**

Yes, as discussed below, the HCP fits the categorical exclusion criteria.

- A. Are the effects of the HCP minor or negligible on federally listed, proposed, or candidate species and their habitats covered under the HCP? [516 DM 8.5(C)(2); HCP Handbook] Consider the degree or amount of take and the impact of that take on the species. Although take may occur under project implementation, after the minimization and mitigation measures proposed in the HCP are done, the impacts must be so minor as to result in negligible effects to the species (516 DM 8).**

The net effect of implementation of the HCP on grizzly bears and their habitat is minor.

**Effect of the Avoidance and Minimization Measures**

The HCP avoidance and minimization measures are designed to: 1) prevent and reduce food attractants in the railroad right-of-way that contribute to grizzly bear train strikes, 2) require a quick response to remove food attractants that are deposited on the railroad tracks or within the railroad right-of-way, and 3) prevent grizzly bears from entering physical areas where they become trapped and struck by trains. These measures are expected to reduce the likelihood of grizzly bear presence and potential mortalities in the railroad right-of-way during BNSF operations.

**Effect of the Incidental Take**

The net effect of incidental take is a loss of grizzly bears and recruitment to the population.

A DNA study estimated the 2004 population in the NCDE at 765 grizzly bears, an estimate that was more than double previous estimates (Kendall et al. 2009). Estimated growth rates since 2004 of 2 to 3 percent annual growth provide a more recent population estimate of 1,044 bears (95% CI = 892–1,218 in 2018) (Costello et al. 2016, C. M. Costello 2019, *in litt.*). During this same time, human-caused mortality has increased. Thus, it appears that the grizzly population in the NCDE has been growing despite an increase in human-caused mortality, including mortalities incidental to BNSF

operations in the Permit Area. Therefore, the population can sustain the estimated level of incidental take attributed to BNSF operations.

To determine the number of bears authorized for incidental take, BNSF and the Service reviewed grizzly mortalities in the NCDE. From 1992 through 2019, the six-year rolling average number of human-caused grizzly bear mortalities ranged between 10.8 and 30 grizzly bears (Table 1, column 1). The six-year rolling average number of train-caused grizzly bear mortalities for the same interval ranged from less than 1.0 to 3.0 grizzly bears per year (Table 1, column 2). The six-year rolling average of train-caused mortalities as a percent of all human-caused mortalities ranged between 3.5 percent and 16.0 percent per interval (Table 1, column 3). From 1992 through 2019, the six-year rolling average number of human-caused female grizzly bear mortalities ranged between 3.8 and 11.5 female grizzly bears. Of the human-caused female mortality for the same period, the six-year rolling average number of train-caused female mortalities ranged between 1.0 to 2.3 grizzly bears per year (Table 1, column 2). The six-year rolling average of train-caused female mortalities as a percent of all human-caused female mortalities ranged between 12.0 and 30 percent per interval (Table 1, column 3). Therefore, overall, the mean, six-year rolling average of train-caused female grizzly bear mortality as a percent of human-caused female mortality was 21.1 percent. Based on the foregoing, and on the fact that the grizzly bear population is growing, and its range is expanding, BNSF estimates incidental take of 18 bears for the Permit Term. This is based on an annual, 6-year rolling average of 2.5 bears for each year of the Permit Term (7 years) rounded for a total of 18 grizzly bears.

<b>Table 1. Six-year Rolling Average Human- and Train-Caused Grizzly Bear Mortality in the NCDE (1992 to 2019).</b>						
<b>6-Year Rolling Average Period</b>	<b>Human-Caused Mortality of all Grizzly Bears per Year</b>	<b>Train-Caused Mortality of all Grizzly Bears per Year<sup>1</sup></b>	<b>Train-Caused Mortality as % of All Human-Caused Mortality of Grizzly Bears</b>	<b>Human-Caused Mortality of all Female Grizzly Bears per Year</b>	<b>Train-Caused Mortality of all Female Grizzly Bears per Year<sup>2</sup></b>	<b>Train-Caused Mortality as a % of Human-Caused Mortality (Female Grizzly Bears)</b>
1992 – 97	10.8	1.3	12.0	5.0	1.5	30.0
1993 – 98	11.7	1.3	11.2	4.7	1.3	27.7
1994 – 99	13.8	2.2	15.9	5.2	1.3	25.0
1995 – 00	15.7	2.2	14.0	6.3	1.3	20.6
1996 – 01	16.8	2.5	14.9	6.5	1.8	27.7
1997 – 02	17.3	2.5	14.5	6.7	1.8	26.9
1998 – 03	17.5	2.5	14.3	6.7	1.8	26.9
1999 – 04	18.8	3.0	16.0	8.2	2.0	24.4
2000 – 05	19.2	2.2	11.5	8.8	2.3	26.1

Low Effect HCP Screening Form BNSF Railway HCP

<b>2001 – 06</b>	18.5	2.7	14.6	7.7	2.0	26.0
<b>2002 – 07</b>	18.7	2.8	15.0	7.5	1.5	20.0
<b>2003 – 08</b>	18.5	3.0	10.5	7.8	1.4	17.9
<b>2004 – 09</b>	19.2	2.8	14.6	8.0	1.3	16.3
<b>2005 – 10</b>	17.7	2.2	12.4	6.0	1.0	16.7
<b>2006 – 11</b>	19.8	2.7	13.6	3.8	1.0	26.3
<b>2007 – 12</b>	21.0	2.2	10.5	7.0	1.0	14.3
<b>2008 – 13</b>	22.2	1.7	7.7	8.2	1.5	18.3
<b>2009 – 14</b>	23.2	1.3	5.6	9.0	1.5	16.7
<b>2010 – 15</b>	23.5	1.0	4.3	9.2	1.5	16.3
<b>2011 – 16</b>	23.7	1.2	5.1	10.5	1.5	14.3
<b>2012 – 17</b>	23.0	0.8	3.5	9.2	1.3	14.1
<b>2013 – 18</b>	27.5	1.2	4.4	10.8	1.3	12.0
<b>2014 – 19</b>	30.0	2.2	7.2	11.5	2.3	20.0
<b>Average for All Intervals</b>	19.5	2.1	11.0	7.6	1.5	21.1

1. The 6-year average annual number of grizzly bear mortalities attributed to trains.
2. Of the 6-year average annual number of female grizzly bear mortalities caused by humans, this number is the amount of female mortalities attributed to trains.

BNSF also anticipates that annual mortality of grizzly bears attributed to trains may be higher than 2.5 individual bears in any year of the Permit Term. Therefore, BNSF would track the following additional parameters to ensure the anticipated effects of take as analyzed in this HCP are not exceeded for the Permit term.

- Train-caused grizzly bear mortality is expected to be no more than 12 percent of the averaged six-year rolling interval for all human-caused grizzly bear mortality.
- Train-caused female grizzly bear mortality is expected to be no more than 22 percent of the averaged six-year rolling interval for all human-caused female grizzly bear mortality.

If train-caused mortality has exceeded two of the three metrics discussed above in two consecutive years, the distribution of funds from the reserve account for new projects or programs would be authorized.

**How the HCP Mitigation Program Will Offset the Incidental Take**

The most meaningful way to offset the loss of breeding female grizzly bears and reduced recruitment in the NCDE is to reduce human-caused female grizzly bear mortality elsewhere in the NCDE - the same population affected by the covered activities. Therefore, the HCP Mitigation Program will offset incidental take by reducing train strike mortalities, reducing human-grizzly bear conflicts,

securing waste facilities, monitoring grizzly bears to prevent conflicts, and improving conflict management responses.

The grizzly bear management programs implemented by MFWP and the Blackfeet Indian Nation are successful in fostering public awareness and support of grizzly bear conservation, reducing the potential for conflicts through education and information regarding attractant storage, and resolving existing conflicts through non-lethal means. Because the efforts are largely preventative, quantifying a reduction in grizzly bear mortality attributed to the program is difficult. In any case, ample evidence demonstrates that securing human food and garbage from grizzly bears can dramatically reduce the number of grizzly bears removed through management actions (see for example Gunther 1994; Proctor et al. 2018). The results of bear specialist programs are summarized biannually at IGBC Subcommittee meetings and in annual reports, such as the annual "Yellowstone Grizzly Bear Investigations", and annual reports from the MFWP grizzly bear specialists in the NCDE (Madel 1996; Wenum 2002; Wenum 2004; MFWP 2014 through 2017 available at: <http://fwp.mt.gov/regions/r1/>) and Cabinet-Yaak Ecosystem (Annis 2017). Montana's bear specialists report annually on progress that can be measured. For example, conflict reports detail the number of grizzly bear conflicts before and after construction of electric fencing around attractant sites (see Agency Summaries in Schwartz and Haroldson 2001). Ongoing monitoring in the CYE demonstrated that the comprehensive human-grizzly bear conflict mitigation program has resulted in a significant reduction in human-caused mortality, increased inter-population connectivity, and improved habitat effectiveness (Proctor et al. 2018).

In summary, the effects to the species are considered minor because the anticipated level of incidental take is offset by the mitigation measures..

***B. Are the effects of the HCP minor or negligible on all other components of the human environment, including environmental values and environmental resources (e.g. air quality, geology and soils, water quality and quantity, socio-economic, cultural resources, recreation, visual resources, environmental justice, etc.), after implementation of the minimization and mitigation measures? [40 CFR 1508.14; 43CFR 46.205; HCP Handbook] We do not consider a CatEx for these human environment factors; the Service's primary authority is to laws under their jurisdiction. If the HCP includes minimization and mitigation measures for these other components as part of their project, we can enforce compliance by requiring in the permit that permittees fully implement their HCP.***

The effects of implementation of the HCP are minor or negligible for all components of the human environment. Implementation of the HCP and issuance of the Permit would have no effect on the following resources: air quality, noise, land use, geology and soils, water quantity, vegetation communities, fish or fish habitat, environmental justice, recreation, or visual resources.



Implementation of the HCP would have minor or negligible effect on the following resources as discussed below: water quality, wildlife and wildlife habitat, socioeconomics, and archaeological, historical, cultural, and tribal trust resources.

### **Water Quality**

Implementation of the HCP includes a rapid response program to clean derailments or spills of grain or other food attractants. The implementation of this program may have a minor effect on water quality by shortening the time in which spills are cleaned such that potential negative impacts to water quality are reduced.

### **Wildlife and Wildlife Habitat**

Implementation of the HCP would have a minor effect on wildlife and wildlife habitat. Measures such as clean-up of grain spills, removal of carrion, and clearing of vegetation within the right-of-way may reduce food sources sought opportunistically by local wildlife populations. The removal of these food sources would also prevent potential strikes of wildlife seeking food sources in the right-of-way. The hiring of grizzly bear technicians and funding for electric fences, remote cameras, waste management, and bear hunter education is expected to benefit a variety of wildlife species (e.g., black bears, raccoon, ungulates, etc.) by preventing habituation to human-generated food sources and generally educating the public on how to live with wildlife. Habituation by any wildlife species can lead to human-cause mortality. Implementation of the HCP is expected to have a net benefit on grizzly bears and not only avoid and minimize incidental take, but also fully offset any unavoidable residual take occurring in the right-of-way.

### **Socioeconomics**

Implementation of the HCP would have a minor effect on socioeconomics. Local employment benefits would be realized by securing the employment of BNSF track inspectors to implement the HCP measures within the railway right-of-way and providing compensatory mitigation in the form of funding for two Montana Fish, Wildlife and Parks (MFWP) grizzly bear technicians and one Blackfoot Nation grizzly bear technician.

### **Archaeological, Historical, Cultural, and Tribal Trust Resources**

Grizzly bears are an important species to many Native American Tribes. Providing compensatory mitigation for the incidental take in the Permit Area would help ensure the ongoing recovery of grizzly bears in the NCDE recovery zone. Issuance of the Permit and implementation of the HCP minimization and compensatory mitigation measures is expected to have minimal or negligible effects on archaeological, historical, cultural, and tribal trust resources. Most of the measures

represent procedural changes, education and outreach, or the provision of funds. Mitigation measures such as replacement of dumpsters, installation of electric fencing, removal of attractants in the right-of-way, and minor vegetation maintenance and restoration would result, at most, in limited ground disturbance, typically in areas previously disturbed. Any ground disturbance activities in the Permit Area would be required to comply with all federal, state, or local regulations governing these resources.

The USFWS has invited Government to Government (G2G) consultation with Native American Tribes with interests in the Permit Area and Plan Area. To date, the USFWS is unaware of any potentially significant issues or resources. If concerns are raised through the G2G process this portion of the form would be evaluated prior to concluding that the project meets the Low Effect HCP Criteria.

**C. Would the incremental impacts of this HCP, considered together with the impacts of other past, present, and reasonably foreseeable future actions (regardless of what agency or person undertakes such other actions) *not* result, over time, in a cumulative effect to the human environment (the natural and physical environment) which would be considered significant? [40 CFR 1508.7; 43CFR 46.205; HCP Handbook]**

The incremental impacts of implementing the HCP and issuing the Permit are expected to impart minor and largely beneficial effects on water quality, wildlife and wildlife habitat, and socioeconomics. These incremental effects are negligible or so minor that they would not contribute to cumulative effects that would be considered significant.

**3.0 DO ANY OF THE EXCEPTIONS TO CATEGORICAL EXCLUSIONS (EXTRAORDINARY CIRCUMSTANCES) LISTED IN 43 CFR 46.215 APPLY TO THIS HCP? IF THE ANSWER IS “YES” TO ANY OF THE QUESTIONS BELOW, THE PERMIT ACTION CANNOT BE CATEGORICALLY EXCLUDED FROM ADDITIONAL NEPA ANALYSIS, AND AN ENVIRONMENTAL ASSESSMENT OR AN ENVIRONMENTAL IMPACT STATEMENT MUST BE PREPARED. EACH “NO” RESPONSE SHOULD INCLUDE AN EXPLANATION.**

**A. Would implementation of the HCP have significant impacts on public health or safety?**

No, implementation of the HCP and issuance of the Permit would not have a significant impact on public health or safety.

**B. Would implementation of the HCP have significant impacts on such natural resources and unique geographic characteristics such as: historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990) or floodplains (Executive Order 11988); national monuments; migratory birds, eagles, or other ecologically significant or critical resources?**

In the Permit Area, BNSF's covered activities are ongoing existing actions and subject to all Federal and State laws governing these resources. Implementation of the HCP conservation measures would not have significant effects on the resources identified above. The proposed HCP avoidance and minimization measures are limited to the railroad right-of-way. The HCP mitigation measures are largely procedural changes, education and outreach programs, or the provision of funds. These types of activities would not affect natural resources or unique geographic characteristics. The specific resources are addressed below.

Historic or cultural resources are discussed below in Sections G and K.

**Park, recreation, or refuge lands**

The Permit Area is located within or adjacent to the Blackfoot Nation Reservation, Glacier National Park, Flathead and Lewis and Clark National Forests, and Stillwater State Forest. The Plan area similarly includes portions of Glacier National Park, several National Forests, and Federal and State lands including recreation areas. Implementation of the conservation measures would not directly affect use or access of park or recreation lands.

**Wilderness areas**

The Permit Area is not located in a wilderness area and implementation of the HCP conservation strategies typically would not occur in wilderness areas. There are areas of wilderness in the Plan area, but no actions are specifically proposed for these areas.

**Wild or scenic rivers**

The Permit Area is located along, and pre-dates, a portion of the Flathead River Wildlife and Scenic River Corridor. While implementation of the HCP conservation strategies could occur near a wild or scenic river, the measures would not affect these resources.

**Migratory birds, eagles**

Measures such as clean-up of grain spills, removal of carrion, and clearing of vegetation within the right-of-way may reduce food sources sought opportunistically by migratory birds. The removal of these food sources would also prevent potential strikes of wildlife seeking food sources in the right-of-way.

**Other resources**

Implementation of the HCP conservation measures would not affect National natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990) or floodplains (Executive Order 11988); national monuments; or other ecologically significant or critical resources.

**C. Would implementation of the HCP have highly controversial environmental effects (defined at 43 CFR 46.30), or involve unresolved conflicts concerning alternative uses of available resources [see NEPA section 102(2)(E)]?**

No, implementation of the HCP and issuance of the Permit would not affect use of available resources and therefore, would not have highly controversial or unresolved conflicts concerning available resources.

**D. Would implementation of the HCP have highly uncertain and potentially significant environmental effects, or involve unique or unknown environmental risks?**

No, implementation of the HCP and issuance of the Permit would not involve unknown or unique environmental risks.

**E. Would implementation of the HCP establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?**

This federal action pertains to lawful activities conducted by the BNSF Railway. No, implementation of the HCP and issuance of the Permit would not set a precedent for future actions with potentially significant environmental effects.

**F. Would implementation of the HCP have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects?**

The HCP would be considered in conjunction with other actions in the NCDE recovery zone but does not have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.

**G. Would implementation of the HCP have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places?**

Issuance of the Permit and implementation of the HCP minimization and compensatory mitigation measures is not expected to affect properties listed or eligible for listing on the National Register of Historic Places. This is because most of the measures represent procedural changes, education and

outreach, or the provision of funds. Mitigation measures such as replacement of dumpsters, installation of electric fencing, removal attractants, and minor vegetation maintenance and restoration activities in the right-of-way would result, at most, in limited ground disturbance, typically in areas with prior ground disturbance. Any ground disturbance activities in the Permit Area would be required to comply with all Federal and State laws governing these resources and in compliance with the requirements.

***H. Would implementation of the HCP have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species? Consider the degree or amount of take and the impact of the take on the species. Although take may occur under project implementation, it must be so minor as to result in negligible species effects after minimization and mitigation measures have been completed. The same concept applies when considering effects to critical habitat.***

None of the three federally listed plants in Montana are expected in the Permit Area. Canada lynx (*Lynx canadensis*) and bull trout (*Salvelinus confluentis*) may occur in the Permit Area but are not covered under the HCP and Permit and no significant effects have been documented.

**Listed Plants**

There are three federally threatened plant species in Montana: Spalding's catchfly (*Silene spaldingii*); Ute's ladies tresses (*Spiranthes diluvialis*); and water howellia (*Howellia aquatilis*). None are reported in the Permit Area and no adverse effects on listed plants are anticipated to result from implementation of the HCP avoidance and minimization measures. These species do have potential to occur in the Plan Area, however, none of the programs proposed for implementation to reduce human-bear conflicts in the Plan Area would occur in habitats supporting listed plants. No effects on federally listed plants are anticipated from implementation of the HCP or issuance of a Permit.

**Bull Trout**

Portions of the Permit Area parallel the Middle Fork Flathead River, a spawning and migratory corridor for resident bull trout. The safe and efficient operation of trains in the Permit Area is governed by rules, procedures, and practices that are contained outlined in Section 2.1 of the HCP. Implementation of rules, procedures, and practices governing daily operations and routine maintenance in the BNSF railroad right-of-way is not known to adversely affect bull trout. Any maintenance activities (e.g., bridge repairs) by BNSF with potential to affect bull trout would be addressed through the necessary regulatory permits from Federal and State regulatory agencies. Implementation of the HCP conservation strategy is not expected to adversely affect bull trout.

**Canada Lynx**

While mortality of lynx is documented on backcountry railroads in Minnesota (USFWS et al. 2013), no mortality of lynx is reported on railroads in Montana; railroads are not identified as a source of mortality contributing to the decline of the species. The Permit Area (a cleared railroad right-of-way) is not lynx habitat. Implementation of the HCP conservation measures is not expected to adversely affect Canada lynx. Further, the HCP avoidance and minimization measures that remove carrion in the Permit Area and conduct an annual spring cleanup and carrion removal would avoid the potential for lynx to be attracted to carrion and potentially struck by a train.

**I. Would implementation of the HCP violate a Federal law, or a State, local, or tribal law, or a requirement imposed for the protection of the environment.**

No, implementation of the HCP and issuance of the Permit would not violate any federal, state, local, or tribal law.

**J. Would implementation of the HCP have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).**

Implementation of the HCP and issuance of the Permit would not have adverse effects on low income or minority populations. The primary minority population adjacent to the Permit Area is the American Indians living in and near the Flathead Reservation and Blackfeet Reservation. The conservation measures include funding for a Blackfeet Nation grizzly bear technician.

**K. Would implementation of the HCP limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).**

No, implementation of the HCP and issuance of the Permit would not affect or limit access to or ceremonial use of Indian sacred sites on Federal lands.

**L. Would implementation of the HCP contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).**

No, implementation of the HCP and issuance of the Permit would not contribute to spread of noxious weeds or invasive species. When revegetating disturbed areas, the HCP requires BNSF to use appropriate seed mixtures that are entirely noxious weed-free and non-attractant to grizzly bears.

#### IV. ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record.

Based on the information and analysis above, I determine that the proposed Incidental Take Permit for the BNSF Railway HCP qualifies for a categorical exclusion, as defined in 40 CFR 1508.4 and in the U.S. Fish and Wildlife Service *Habitat Conservation Planning Handbook*.

Furthermore, no extraordinary circumstances identified in 43 CFR 46.215 exist for the BNSF Railway HCP. Therefore, the Service's permit action for BNSF Railway HCP is categorically excluded from further NEPA review and documentation, as provided by 40 CFR 1507.3; 43 CFR 46.205; 43 CFR 46.215; 516 DM 3; 516 DM 8.5; and 550 FW 3.3C. A more extensive NEPA process is unwarranted, and no further NEPA documentation will be made.

Other supporting documents:

- BNSF Grizzly Bear Habitat Conservation Plan
- Intra-Service Biological Opinion

Signature Approval:

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Jodi L. Bush  
Field Supervisor, Montana Field Office

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Date

## V. REFERENCES

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