

# **ENVIRONMENTAL ASSESSMENT**

## **HYMER MINE SHAFT CARBON COUNTY, MONTANA**



**Prepared By:  
Montana Department of Environmental Quality  
Abandoned Mine Bureau**

**April 17, 2012**

## **SECTION 1.0: PURPOSE AND NEED FOR ACTION**

### AGENCY NAME:

Montana Department of Environmental Quality  
Abandoned Mine Bureau

### LOCATION:

NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> NW <sup>1</sup>/<sub>4</sub> of Section 34 Township 7S, Range 20E

### TYPE AND PURPOSE OF ACTION:

In 1998, the Montana Department of Environmental Quality Abandoned Mine Bureau (DEQ AMB) received a complaint about a subsidence located at 512 Adams Avenue South in Red Lodge, Carbon County, Montana. There was an active subsidence area in the backyard near a newly constructed deck and house addition. The 1907 and 1912 Sanborn Fire Insurance Map verified that an abandoned mine shaft associated with the Red Lodge Coal Company, also known as the Hymer Mine Shaft, was once located on this lot.

According to a neighbor, there was a major collapse (several feet deep) over the shaft area in 1959 which was backfilled. The original house, built in 1915, was smaller and far enough away from the shaft that no subsidence would have affected it. The landowner added onto the original house and added a deck. Prior to DEQ AMB initiating any project activities in 1998, a hairline crack was observed in the house foundation and about 3-inches of settling in the deck was observed by the landowner from 1994 to 1998. The subsidence depression was 25 feet in diameter with a one foot depression. DEQ AMB responded to this subsidence by receiving authorization from the Office of Surface Mining and Enforcement Field Office Director to use DEQ AMB emergency funding.

DEQ AMB completed an emergency project at the site in 1998. The purpose of the project was to prevent continued subsidence in the area around the Hymer Mine Shaft. Specific actions, that took place as part of this reclamation project include:

- Completing an investigation drilling program
- Designing a grouting plan
- Injecting grout and monitoring movement of nearby structures
- Restoring the surface after grouting was completed

This emergency reclamation project was completed in August 1998. In 2011, DEQ AMB received a call from the landowner stating that the deck on the house had continued to subside over the years. The landowner states that he has had to continually jack his deck up and insert shoring to level the deck (see cover photo). DEQ AMB plans to complete a maintenance project to address this continued subsidence in summer 2012.

**SECTION 1.1 RECLAMATION ACTIONS**

The 1998 emergency reclamation project was undertaken under the direction of AMB administered by the Remediation Division of DEQ to perform drilling and grouting to prevent continued subsidence in the area around the Hymer Mine Shaft. The 1998 project included drilling five probe holes and five monitoring holes totaling 329.5 feet, injecting 62.2 cubic yards of grout, monitoring grout injection and surface movement, and reclaiming the surface disturbance. This project was considered an “emergency project” so the environmental analysis was not required prior to initiating the project.

Follow up environmental analysis documentation was not completed after completion of the project in 1998. Because of the need for maintenance at the site, this environmental analysis document is being completed for the 1998 emergency project and for future maintenance projects at the site.

<b>SECTION 2: IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>HYMER MINE SHAFT SUBSIDENCE</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p>1. <b>GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b></p> <p>Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>Red Lodge, Montana is located on the northern edge of the Beartooth Mountain Range along the Rock Creek valley. Quaternary alluvial terraces and recent alluvium overlie the Tertiary Fort Union Formation in the area. A thick Quaternary alluvial terrace deposit forms the west edge of the valley and is referred to as the West Bench. Thinner deposits of Quaternary alluvium overlie the Fort Union which has been eroded to form the east edge (East Bench) of the valley. The town of Red Lodge is underlain by Quaternary terrace deposits and recent alluvium. Based on a review of published material and well logs, the thickness of the alluvium appears to vary from a few feet to over 100 feet in the valley bottom. The soils do not appear to be fragile, erosive, susceptible to compaction, or unstable.</p> <p>The Fort Union Formation is readily exposed along the east bench and consists of mainly shale, siltstone, sandstone, and coal deposits. The bedrock in the Red Lodge area dips approximately 25 degrees to the south-southwest toward the Beartooth Mountains. The coal deposits are part of the Red Lodge-Bearcreek Coal Field, formerly the Red Lodge Coal Field. The coal deposits are present on the east and west benches as well as below the town of Red Lodge. These geologic features are consistent with coal formation which indicates that mined out coal seams may be unstable and susceptible to collapse and surface subsidence. At this time there are no special reclamation considerations as the coal seams are deep and there are no open voids present at the surface.</p>
<p>2. <b>WATER QUALITY, QUANTITY AND DISTRIBUTION:</b></p> <p>Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>During the 1998 drilling and grouting project at the project area, groundwater was encountered at 29 feet below ground surface.</p> <p>Rock Creek is located approximately 0.3 miles east of the project area and flows year round. This is the only perennial stream located near the project area.</p> <p>Given the distance to Rock Creek and anticipated reclamation options such as drilling and grouting or compaction, this project will not impact groundwater or surface water quality in the vicinity of the project area.</p>

**SECTION 2: IMPACTS ON THE PHYSICAL ENVIRONMENT**

**HYMER MINE SHAFT SUBSIDENCE**

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>3. AIR QUALITY:</p> <p>Will pollution or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>The current ambient air quality in Red Lodge is good. The project is not located in any special air quality zones regulated by the State of Montana. Slight amounts of dust may be produced if drilling activities are performed as part of the maintenance project; however, any dust produced would be localized at the project area and would not be produced in quantities that would affect air quality.</p>
<p>4. VEGETATION COVER, QUALITY AND QUANTITY:</p> <p>Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>The project area is a residential area located within the town of Red Lodge, Montana. The area is composed of typical lawn grasses and landscaping plants. Portions of lawn grass will likely be impacted and these areas will require reseeding with similar type lawn grass.</p> <p>Consultation with the Montana Natural Heritage Program (<b>Attachment 1</b>) indicated that no threatened or endangered plant species have been recorded within a one (1) mile buffer of the Hymer Shaft.</p>
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE HABITATS:</p> <p>Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>Consultation with the Montana Natural Heritage Program (<b>Attachment 1</b>) indicates that eight (8) species of concern (harlequin duck, greater sage-grouse, brewer’s sparrow, Cassin’s finch, hoary bat, white-tailed prairie dog, grizzly bear, and wolverine) have been recorded within a one (1) mile buffer of the Hymer Shaft. The grizzly bear is the only species listed as threatened and endangered.</p> <p>The project area is a residential area located within the town of Red Lodge, Montana. The area consists of residential houses, paved streets, sidewalks, residential yards, and landscaping plants and trees. The project area does not provide suitable habitat for any of the eight (8) species of concern listed above. Therefore it is not likely that important wildlife, birds, or fish substantially use the area. DEQ AMB concluded that the proposed project is not likely to have any adverse effect on any of the above listed species of concern or threatened or endangered species. DEQ AMB consulted with United States Fish and Wildlife Service (USFWS) on threatened and endangered species at the site. USFWS concurred with DEQ AMB’s findings (<b>Attachment 2</b>).</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES:</p> <p>Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>Consultation with the Montana Natural Heritage Program (<b>Attachment 1</b>) indicates that eight (8) species of concern (harlequin duck, greater sage-grouse, brewer’s sparrow, Cassin’s finch, hoary bat, white-tailed prairie dog, grizzly bear, and wolverine) have been recorded within a one (1) mile buffer of the Hymer Shaft. The grizzly bear is the only species listed as threatened and endangered.</p> <p>The project area is a residential area located within the town of Red Lodge, Montana. The area consists of residential houses, paved streets, sidewalks, residential yards, and landscaping plants and trees. The project area does not include any streams, wetlands, sagebrush, conifer forest, or riparian areas which are the habitats required by the eight (8) species of concern. Based on an evaluation of the site and the habitats required by the species of concern, the project area does not support suitable habitat for any of the species of concern. DEQ AMB concluded that the proposed project is not likely to have any adverse effect on any of the above listed species of concern or threatened or endangered species. DEQ AMB consulted with United States Fish and Wildlife Service (USFWS) on threatened and endangered species at the site. USFWS concurred with DEQ AMB’s findings (<b>Attachment 2</b>).</p>

**SECTION 2: IMPACTS ON THE PHYSICAL ENVIRONMENT**

**HYMER MINE SHAFT SUBSIDENCE**

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>7. HISTORICAL AND ARCHEOLOGICAL SITES:</p> <p>Are any historical, archeological or paleontological resources present?</p>	<p>Based on historical information, the Hymer Shaft never reached a depth greater than 100 feet and never produced any coal. According to old timers in Red Lodge, My. Hymer gave up on the shaft after his son was killed in the shaft. The 1907 and 1912 Sanborn Fire Insurance Map show a coal bin, hoisting engine, and an unnamed mine feature at the Hymer Shaft. The maps indicate that no watchman is present and that the hoisting works were not in operation. The historic Hymer Mine area now consists of residential houses, garages, residential yards, and landscaping plants and trees, and the area has been completely redeveloped since the time of the mine for residential use. Based on DEQ AMB site visits, there is no longer any trace of the Hymer Mine or mine features within the project area. During the 1998 project, several boreholes were drilled and no historical, archeological, or paleontological resources were encountered. DEQ AMB consulted with the Carbon County Historical Society (CCSH), which is a Montana certified local government, on the projects impact(s) on any potential historic features. CCHS concluded that the project “will not adversely impact any cultural, historical, or archeological resources at the site, nor within a half-mile radius thereof” (<b>Attachment 3</b>).</p>
<p>8. AESTHETICS:</p> <p>Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>The project area is a residential area located within the town of Red Lodge, Montana. The project area is not located on any prominent topographic feature. Since the project area is located within a residential neighborhood, it will be visible from a populated area. Drilling is a proposed component of the maintenance project. It is anticipated that there will be some noise associated with drilling activities; however, such noise will take be in short duration (&lt; 2 days) and will take place during daylight hours.</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</p> <p>Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>Activities associated with the maintenance project include drilling, digging test pits with a backhoe, and conducting structural inspections. None of these project activities will use resources that are limited in the area. All equipment and supplies will be supplied by contractors. There are no known activities nearby that will affect the project.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</p> <p>Are there other activities nearby that will affect the project?</p>	<p>There are no other known activities nearby that will affect the project.</p>

**SECTION 3: IMPACTS ON THE HUMAN POPULATION**

**HYMER MINE SHAFT SUBSIDENCE**

<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p>1. HUMAN HEALTH AND SAFETY:</p> <p>Will this project add to health and safety risks in the area?</p>	<p>Finding the cause of the continued subsidence and fixing the problem will eliminate a safety risk in the area. During investigation and reclamation activities, all contactors will be required to have a site specific health and safety plan so that any potential health and safety risks resulting from the project are eliminated. This project will not add to health and safety risks in the area.</p>
<p>2. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</p> <p>Will the project add to or alter these activities?</p>	<p>The project area is a residential area located within the town of Red Lodge, Montana. This project will not add to or alter any industrial, commercial and agricultural activities and production in the area.</p>
<p>3. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</p> <p>Will the project create more or eliminate jobs? If so, estimated number.</p>	<p>This project will have a positive impact on the local economy due to the local employment via materials purchased at the local level and the use of local contractors. This project is estimated to create three (3) to six (6) jobs.</p>
<p>4. LOCAL AND STATE TAX BASE AND TAX REVENUES:</p> <p>Will the project create or eliminate tax revenue?</p>	<p>This project will have no effect on the tax base or revenues.</p>
<p>5. DEMAND FOR GOVERNMENT SERVICES:</p> <p>Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>Any additional traffic added to existing roads will occur during initial mobilization and final demobilization of the project areas. Added traffic may include the mobilization of a drill rig and backhoe to and from the project area a few extra trucks belonging to project personnel. Given the size and scope of the maintenance project no additional government services are anticipated.</p>
<p>6. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</p> <p>Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Reclamation investigation and construction activities associated with the project area would comply with all Federal, State, regional, and local land use plans, programs, and policies. Given the size and scope of the maintenance project, it is not anticipated that there will be any zoning or management plans in effect.</p>
<p>7. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</p> <p>Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>The project area is located on private property. The project area is a residential area located within the town of Red Lodge, Montana and is accessed via public roadways. There is no wilderness or recreational area nearby or accessed through the project area.</p>

**SECTION 3: IMPACTS ON THE HUMAN POPULATION**

**HYMER MINE SHAFT SUBSIDENCE**

<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p>8. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</p> <p>Will the project add to the population and require additional housing?</p>	<p>This project will not add to the population or require additional housing. Investigation and reclamation work will be completed by engineers and contractors living within or near the project area.</p>
<p>9. SOCIAL STRUCTURES AND MORES:</p> <p>Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>The project will not disrupt native or traditional lifestyles. Some disruption to the local neighborhood may take place due to drilling activities but such disruptions will be short term and completed during daylight hours.</p>
<p>10. CULTURAL UNIQUENESS AND DIVERSITY:</p> <p>Will the action cause a shift in some unique quality of the area?</p>	<p>The projects will not cause any shifts in unique qualities of the areas.</p>
<p>11. PRIVATE PROPERTY IMPACTS:</p> <p>Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants, of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.</p>	<p>The actions have been approved by the landowner. The landowner has signed a Notice and Consent for Entry giving DEQ AMB, their agents, and/or contractors permission to access the property. At the completion of the projects, all disturbed areas will be reclaimed and any structures (fences, etc) that have been moved will be placed in their original location. No other regulatory action will take place.</p>
<p>12. ENVIRONMENTAL JUSTICE:</p> <p>Will the actions have disproportionate effect on any demographic population with regard to either income level or minority status?</p>	<p>AMB has prioritized the project in accordance with its statutory mandates and has also determined from United States Government Census figures that there is no disproportionate effect on any demographic population with regard to either income level or minority status. No consideration regarding the selection of this project was made in relation to income or race (<b>Attachment 4</b>).</p>

A. PERSONS, ORGANIZATIONS AND AGENCIES CONTACTED

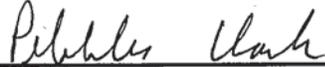
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B. PREPARERS AND REVIEWERS

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Abandoned Mine Bureau  
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Helena, MT. 59620



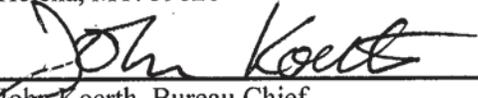
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Pebbles Clark, Project Manager

Date: 04/17/2012

Reviewed by:

Montana Department of Environmental Quality  
Abandoned Mine Bureau  
1100 N. Last Chance Gulch  
P.O. Box 200901  
Helena, MT. 59620



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John Koerth, Bureau Chief

Date: 4/17/12

# **ATTACHMENT 1**

## **Montana Natural Heritage Program Consultation**



P.O. Box 201800 • 1515 East Sixth Avenue • Helena, MT 59620-1800 • fax 406.444.02661 • tel 406.444.5354 • <http://mtnhp.org>

February 27, 2012

Pebbles Clark  
MT DEQ  
1100 N. Last Chance Gulch  
Helena, Montana 59620

Dear Pebbles,

I am writing in response to your recent request regarding Montana Species of Concern in the vicinity of the Hymer Mine Subsidence project, in Section 34, T07S, R20E, in Carbon County. I checked our databases for information in this general area and have enclosed 13 species occurrence reports for 8 Species of Concern, and a map depicting Species of Concern and wetland locations. Note that the maps are in Adobe GeoPDF format. With the appropriate Adobe Reader, it provides a convenient way to query and understand the information presented on the map.

Please keep in mind the following when using and interpreting the enclosed information and maps:

- (1) These materials are the result of a search of our database for Species of Concern that occur in an area defined by the requested township, range and section with an additional one-mile buffer surrounding the requested area. This is done to provide a more inclusive set of records and to capture records that may be immediately adjacent to the requested area. Please let us know if a buffer greater than 1 mile would be of use to your efforts. Reports are provided for the Species of Concern that are located in your requested area with a one-mile buffer. Species of Concern outside of this buffered area may be depicted on the map due to the map extent, but are not selected for the SOC report.
- (2) On the map, polygons represent one or more source features as well as the locational uncertainty associated with the source features. A source feature is a point, line, or polygon that is the basic mapping unit of a Species Occurrence (SO) representation. The recorded location of the occurrence may vary from its true location due to many factors, including the level of expertise of the data collector, differences in survey techniques and equipment used, and the amount and type of information obtained. Therefore, this inaccuracy is characterized as locational uncertainty, and is now incorporated in the representation of an SO. If you have a question concerning a specific SO, please do not hesitate to contact us.
- (3) This report may include sensitive data, and is not intended for general distribution, publication, or for use outside of your organization. In particular, public release of specific location information

may jeopardize the welfare of threatened, endangered, or sensitive species or biological communities.

- (4) The accompanying map(s) display land management status, which may differ from ownership. Also, this report may include data from privately owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.
- (5) Additional biological data for the search area(s) may be available from other sources. We suggest you contact the U.S. Fish and Wildlife Service for any additional information on threatened and endangered species (406-449-5225). For additional fisheries information in your area of interest, you may wish to contact Montana Fish, Wildlife, and Park's Montana Fisheries Information System (phone: 406-444-3373, or web site: <http://fwp.mt.gov/fishing/mFish/>).
- (6) Additional information on species habitat, ecology and management is available on our web site in the Plant, Animal, and ecological Systems Field Guides, which we encourage you to consult for valuable information. You can access these guides at <http://mtnhp.org>. General information on any species can be found by accessing the link to NatureServe Explorer.**

The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments. The information is intended for project screening only with respect to Species of Concern, and not as a determination of environmental impacts, which should be gained in consultation with appropriate agencies and authorities.

I hope the enclosed information is helpful to you. Please feel free to contact me at (406) 444-3290 or via my e-mail address, below, should you have any questions or require additional information.

Sincerely,



Martin P. Miller  
Montana Natural Heritage Program  
martinm@mt.gov



# Species of Concern Data Report

Visit <http://mtnhp.org> for additional information.

Report Date:  
**Monday, February 27, 2012**

## Histrionicus histrionicus

[View Species in MT Field Guide](#)

**Common Name:** Harlequin Duck

**General Habitat:** Mountain streams

**Description:** Vertebrate Animal

**Mapping Delineation:**

Stream reaches with confirmed presence of pairs, downy young, or juveniles or where breeding effort is believed to occur due to confirmed effort in adjacent areas. Minimum stream reach length is 1,000 meters (500 meters below and above a point observation). Occurrences on smaller order streams include the area 500 meters above an observation down to the mouth of that stream. In order to reflect the importance of adjacent terrestrial habitats to survival, stream reaches are buffered 100 meters into the terrestrial habitat based on PACFISH/INFISH Riparian Conservation Area standards.

### Species Status

[Click Status for Explanations](#)

**Natural Heritage Ranks:**

**State:** S2B  
**Global:** G4

**Federal Agency Status:**

**U.S. Fish & Wildlife Service:**  
**U.S. Forest Service:** SENSITIVE  
**U.S. Bureau of Land Management:** SENSITIVE

**FWP CFWCS Tier:** 1

**MT PIF Code:** 1

### Species Occurrences

<b>Species Occurrence Map Label:</b>	<b>217432</b>	<b>SO Number:</b>	20
<b>First Observation Date:</b>	1990-07-01	<b>Acreage:</b>	1,605
<b>Last Observation Date:</b>	1997-06-24	<b>SO Rank:</b>	

## Centrocercus urophasianus

[View Species in MT Field Guide](#)

**Common Name:** Greater Sage-Grouse

**General Habitat:** Sagebrush

**Description:** Vertebrate Animal

**Mapping Delineation:**

Confirmed breeding area based on the presence of a nest, chicks, juveniles, or adults on a lek. Point observation location is buffered by a minimum distance of 6,400 meters in order to encompass the latest research on the area used for breeding, nesting, and brood rearing and otherwise is buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

### Species Status

[Click Status for Explanations](#)

**Natural Heritage Ranks:**

**State:** S2  
**Global:** G4

**Federal Agency Status:**

**U.S. Fish & Wildlife Service:** C  
**U.S. Forest Service:** SENSITIVE  
**U.S. Bureau of Land Management:** SENSITIVE

**FWP CFWCS Tier:** 1

**MT PIF Code:** 1

### Species Occurrences

<b>Species Occurrence Map Label:</b>	<b>357982</b>	<b>SO Number:</b>	186
<b>First Observation Date:</b>	2006-07-14	<b>Acreage:</b>	31,636
<b>Last Observation Date:</b>	2006-07-14	<b>SO Rank:</b>	



# Species of Concern Data Report

Visit <http://mtntp.org> for additional information.

Report Date:  
**Monday, February 27, 2012**

## Species Occurrences

Species Occurrence Map Label:	<b>357980</b>	SO Number:	185
First Observation Date:	2006-07-05	Acreage:	31,636
Last Observation Date:	2006-07-05	SO Rank:	

Species Occurrence Map Label:	<b>358046</b>	SO Number:	188
First Observation Date:	2006-08-15	Acreage:	31,636
Last Observation Date:	2006-08-15	SO Rank:	

Species Occurrence Map Label:	<b>358044</b>	SO Number:	187
First Observation Date:	2006-07-14	Acreage:	31,636
Last Observation Date:	2006-07-14	SO Rank:	

## Spizella breweri [View Species in MT Field Guide](#)

**Common Name:** Brewer's Sparrow **General Habitat:** Sagebrush

**Description:** Vertebrate Animal

**Mapping Delineation:**

Confirmed breeding area based on the presence of a nest, chicks, or territorial adults during the breeding season. Point observation location is buffered by a minimum distance of 100 meters in order to encompass the maximum territory size reported for the species and otherwise is buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

## Species Status [Click Status for Explanations](#)

**Natural Heritage Ranks:**

State: S3B  
Global: G5

**Federal Agency Status:**

U.S. Fish & Wildlife Service:  
U.S. Forest Service:  
U.S. Bureau of Land Management: SENSITIVE

**FWP CFWCS Tier:** 2

**MT PIF Code:** 2

## Species Occurrences

Species Occurrence Map Label:	<b>207152</b>	SO Number:	278,797
First Observation Date:	2004-06-16	Acreage:	1,112
Last Observation Date:	2004-06-16	SO Rank:	

## Carpodacus cassinii [View Species in MT Field Guide](#)

**Common Name:** Cassin's Finch **General Habitat:** Drier conifer forest

**Description:** Vertebrate Animal

**Mapping Delineation:**

Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing the courtship and foraging distance from nesting areas and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.



# Species of Concern Data Report

Visit <http://mtnhp.org> for additional information.

Report Date:  
**Monday, February 27, 2012**

## Species Status

[Click Status for Explanations](#)

### Natural Heritage Ranks:

State: S3  
Global: G5

### Federal Agency Status:

U.S. Fish & Wildlife Service:  
U.S. Forest Service:  
U.S. Bureau of Land Management:

FWP CFWCS Tier: 3

MT PIF Code: 3

## Species Occurrences

Species Occurrence Map Label:	<b>290296</b>	SO Number:	348
First Observation Date:	2006-07-01	Acreage:	70
Last Observation Date:	2006-07-01	SO Rank:	

## Lasiurus cinereus

[View Species in MT Field Guide](#)

**Common Name:** Hoary Bat **General Habitat:** Riparian and forest  
**Description:** Vertebrate Animal

### Mapping Delineation:

Mistnet captures, definitively identified acoustic recordings, and definitively identified roosting individuals buffered by a minimum distance of 3,500 meters in order to be conservative about encompassing the maximum reported foraging distance for the congeneric *Lasiurus borealis* and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters.

## Species Status

[Click Status for Explanations](#)

### Natural Heritage Ranks:

State: S3  
Global: G5

### Federal Agency Status:

U.S. Fish & Wildlife Service:  
U.S. Forest Service:  
U.S. Bureau of Land Management:

FWP CFWCS Tier: 2

MT PIF Code:

## Species Occurrences

Species Occurrence Map Label:	<b>300748</b>	SO Number:	616,215
First Observation Date:	2008-07-08	Acreage:	9,461
Last Observation Date:	2008-07-08	SO Rank:	

## Cynomys leucurus

[View Species in MT Field Guide](#)

**Common Name:** White-tailed Prairie Dog **General Habitat:** Sagebrush grassland  
**Description:** Vertebrate Animal

### Mapping Delineation:

Polygons with outer boundaries defined by the maximum extent of clustered burrow entrances (i.e., "towns"). Clusters of burrow entrances separated by distances of approximately 100 meters will generally be considered separate towns.



# Species of Concern Data Report

Visit <http://mtnhp.org> for additional information.

Report Date:  
**Monday, February 27, 2012**

## Species Status

[Click Status for Explanations](#)

### Natural Heritage Ranks:

State: S1  
Global: G4

### Federal Agency Status:

U.S. Fish & Wildlife Service:  
U.S. Forest Service: SENSITIVE  
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 1

MT PIF Code:

## Species Occurrences

Species Occurrence Map Label:	<b>156073</b>	SO Number:	16
First Observation Date:		Acreage:	71
Last Observation Date:		SO Rank:	

Species Occurrence Map Label:	<b>156071</b>	SO Number:	15
First Observation Date:		Acreage:	0
Last Observation Date:		SO Rank:	

Species Occurrence Map Label:	<b>156069</b>	SO Number:	14
First Observation Date:		Acreage:	0
Last Observation Date:		SO Rank:	

## Ursus arctos [View Species in MT Field Guide](#)

**Common Name:** Grizzly Bear **General Habitat:** Conifer forest

**Description:** Vertebrate Animal

### Mapping Delineation:

U.S. Fish and Wildlife Service recovery zone boundaries for the Northern Continental Divide, Cabinet-Yaak, Yellowstone, and Bitterroot recovery areas.

## Species Status

[Click Status for Explanations](#)

### Natural Heritage Ranks:

State: S2S3  
Global: G4

### Federal Agency Status:

U.S. Fish & Wildlife Service: LT,XN  
U.S. Forest Service: THREATENED  
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 1

MT PIF Code:

## Species Occurrences

Species Occurrence Map Label:	<b>193731</b>	SO Number:	3
First Observation Date:		Acreage:	3,280,618
Last Observation Date:		SO Rank:	



Natural Resource Information System  
Montana State Library  
PO Box 201800  
Helena, MT 59620-1800  
(406)444-3009 mtnhp@mt.gov

# Species of Concern Data Report

Visit <http://mtnhp.org> for additional information.

Report Date:  
Monday, February 27, 2012

## Gulo gulo

[View Species in MT Field Guide](#)

**Common Name:** Wolverine

**General Habitat:** Boreal Forest and Alpine Habitats

**Description:** Vertebrate Animal

### Mapping Delineation:

Confirmed area of occupancy based on the documented presence of adults or juveniles within tracking regions containing core habitat for the species. Outer boundaries of tracking regions are defined by areas of forest cover on individual mountain ranges or clusters of adjacent mountain ranges with continuous forest cover.

### Species Status

[Click Status for Explanations](#)

#### Natural Heritage Ranks:

State: S3  
Global: G4

#### Federal Agency Status:

U.S. Fish & Wildlife Service: C  
U.S. Forest Service: SENSITIVE  
U.S. Bureau of Land Management: SENSITIVE

FWP CFWCS Tier: 2

MT PIF Code:

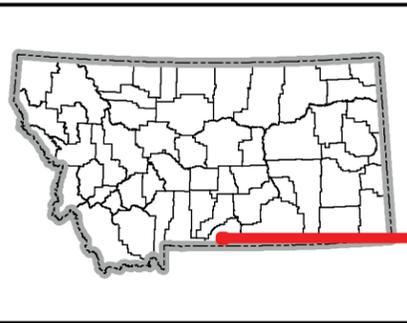
### Species Occurrences

Species Occurrence Map Label:	<b>158029</b>	SO Number:	13
First Observation Date:	1894	Acreage:	2,903,533
Last Observation Date:	2011	SO Rank:	

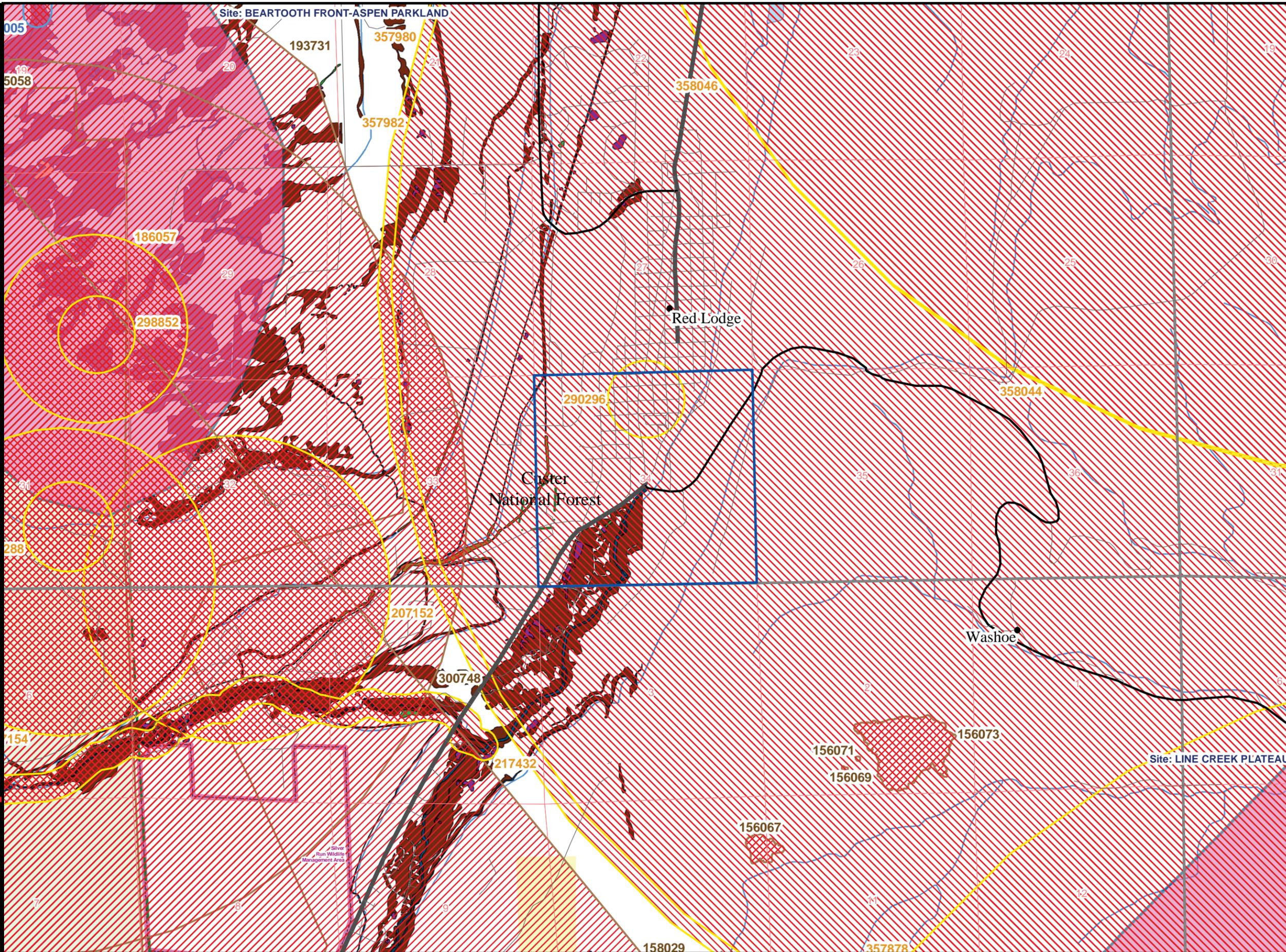
# Montana Species of Concern Hymer Mine Subsidence

SPECIES OF CONCERN: A polygon feature representing only what is known from direct observation with a defined level of certainty regarding the spatial location of the feature.

- NonVascular Plants**
-  NonVascular Plants
- Vascular Plants**
-  Vascular Plants
- Invertebrates**
-  Invertebrates
- Amphibians**
-  Amphibians
- Fish**
-  Fish
- Reptiles**
-  Reptiles
- Birds**
-  Birds
- Mammals**
-  Mammals
- Sites**
-  Sites
- Wetland and Riparian Classes**
-  Lacustrine
-  Freshwater Pond
-  Freshwater Emergent Wetland
-  Freshwater Shrub Wetland
-  Freshwater Forested Wetland
-  Riverine
-  Riparian Emergent
-  Riparian Shrub
-  Riparian Forested

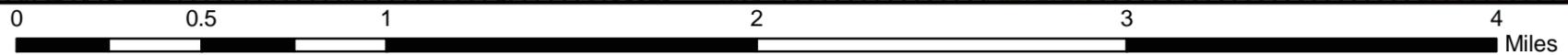


Not all legend items may occur on the map.  
 Features shown on this map do not imply public access to any lands.  
 This map displays management status, which may vary from ownership.



Natural Resource Information System, Montana State Library  
 1515 East Sixth Ave., Helena, MT 59620-1800

406 444-5354 <http://mtnhp.org> [mtnhp@mt.gov](mailto:mtnhp@mt.gov)



Map Document: K:\REQUESTS\Requests\12\MT\12mt0025\12mt0025.mxd (2/27/2012)

## **ATTACHMENT 2**

### **United States Fish and Wildlife Service Threatened and Endangered Species Consultation**



United States Department of the Interior  
Fish and Wildlife Service

Ecological Services  
Montana Field Office  
585 Shepard Way  
Helena, Montana 59601-6287



Phone: (406) 449-5225 Fax: (406) 449-5339

M.38 - DEQ (I)

April 3, 2012

Pebbles Clark, Project Manager  
Abandoned Mine Bureau  
Montana Department of Environmental Quality  
P.O. Box 200901  
Helena, Montana 59620-0901

Dear Ms. Clark:

I am responding to your letter dated March 6, 2012 requesting consultation with U.S. Fish and Wildlife Service (Service) regarding impacts to federally listed threatened and endangered species from abandoned mine reclamation work at the Hymer Mine Shaft. The project is located approximately within the town of Red Lodge, Montana.

We have reviewed the proposed activity and we concur with your determination that the proposed mine reclamation activities are not likely to adversely affect the grizzly bear (*Ursus arctos horribilis*) or the Canada lynx (*Lynx canadensis*). Therefore, pursuant to 50 CFR 402.13 (a), formal consultation is not required.

We appreciate your efforts to ensure the conservation of threatened and endangered species as part of our joint responsibilities under the Endangered Species Act. If you have questions or comments related to this correspondence, please Mike McGrath of my staff at 406-449-5225, extension 201.

Sincerely,

R. Mark Wilson  
Field Supervisor

## **ATTACHMENT 3**

### **Carbon County Historical Society Historic Preservation Consultation**

SCOTT LAUF  
Historic Preservation Officer  
Carbon County, MT

April 11, 2012

Pebbles Clark  
Abandoned Mines Section  
Remediation Division, Dept. of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901

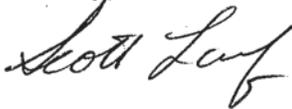
Dear Pebbles,

Per your request, I have conducted a historic property preservation review of the Hymer Mine Shaft located at 512 S. Adams Ave. Please see the enclosed form which provides some historical background on the site as well as my assessment.

Based upon my extensive research, site inspection, and review, the proposed reclamation activities by the DEQ will *not* adversely impact any cultural, historical or archeological resources at the site, nor within a half-mile radius thereof.

I hope that this is helpful in completing your cultural resources evaluation for this property. Let me know if you would like copies of property records and/or additional news articles from our archives that were not included in the Spectrum Engineering report. If you have any further questions or concerns, please feel free to contact me.

Sincerely,



Scott Lauf  
Historic Preservation Officer  
Carbon County, MT

RECEIVED

APR 12 2012

Department of  
Environmental Quality  
Remediation Division

CC: Mayor Brian Roat,  
City of Red Lodge

224 Broadway Ave. N.  
P.O. Box 881  
Red Lodge, MT 59068

PHONE (406) 446-3667  
E-MAIL [preservation@carboncountyhistory.com](mailto:preservation@carboncountyhistory.com)



*about the Red Lodge Coal Co. A search of CCHS archives found no mine maps that cite the Hymer Shaft. A Cultural Resource Inventory search conducted by the State Historic Preservation Office (SHPO) found no significant historical sites at this location nor within a ½ mile radius. A review of the Historical & Architectural Inventory records of residences in Red Lodge, which were completed in 1986, found no significant historical resources at this address. An attempt to locate any surviving relatives of W.E. Hymer within the Red Lodge area was unsuccessful. A visit to the site and interview with the owner revealed that he discovered the original concrete foundation that grounded the mine shaft's hoisting equipment when he installed a new garage in 1994.*

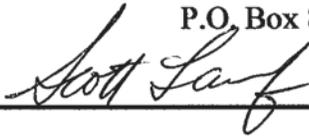
**6. Conclusion and Determination:**

  X   **Based on the site review, it has been determined that the proposed action will *not* affect any historic property or archaeological site.**

       **Based on the review, it has been determined that there may be certain historical properties or archaeological sites that may be affected by the proposed action. Further investigation and review is required. The preservation office recommends halting all action on this project until further information is obtained.**

**Name of Form Preparer:** Scott Lauf,  
Historic Preservation Officer, Carbon County  
P.O. Box 881, Red Lodge, MT 59068

**Signature:** \_\_\_\_\_



**Date of Site Visited:** April 10, 2012

**Date of Review Completed:** April 11, 2012

## **ATTACHMENT 4**

### **Environmental Justice Documentation**



DP-1

Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/dpsf.pdf>.

**Geography: Carbon County, Montana**

Subject	Number	Percent
<b>SEX AND AGE</b>		
Total population	10,078	100.0
Under 5 years	410	4.1
5 to 9 years	543	5.4
10 to 14 years	624	6.2
15 to 19 years	585	5.8
20 to 24 years	315	3.1
25 to 29 years	425	4.2
30 to 34 years	492	4.9
35 to 39 years	523	5.2
40 to 44 years	583	5.8
45 to 49 years	842	8.4
50 to 54 years	1,032	10.2
55 to 59 years	914	9.1
60 to 64 years	895	8.9
65 to 69 years	605	6.0
70 to 74 years	463	4.6
75 to 79 years	317	3.1
80 to 84 years	280	2.8
85 years and over	230	2.3
Median age (years)	48.1	( X )
16 years and over	8,362	83.0
18 years and over	8,092	80.3
21 years and over	7,856	78.0
62 years and over	2,437	24.2
65 years and over	1,895	18.8
Male population	5,105	50.7
Under 5 years	207	2.1
5 to 9 years	291	2.9
10 to 14 years	342	3.4
15 to 19 years	301	3.0
20 to 24 years	158	1.6
25 to 29 years	217	2.2
30 to 34 years	230	2.3
35 to 39 years	260	2.6
40 to 44 years	301	3.0
45 to 49 years	411	4.1
50 to 54 years	512	5.1
55 to 59 years	461	4.6
60 to 64 years	476	4.7
65 to 69 years	318	3.2
70 to 74 years	232	2.3
75 to 79 years	162	1.6
80 to 84 years	131	1.3
85 years and over	95	0.9

Subject	Number	Percent
Median age (years)	47.9	( X )
16 years and over	4,201	41.7
18 years and over	4,066	40.3
21 years and over	3,933	39.0
62 years and over	1,235	12.3
65 years and over	938	9.3
Female population	4,973	49.3
Under 5 years	203	2.0
5 to 9 years	252	2.5
10 to 14 years	282	2.8
15 to 19 years	284	2.8
20 to 24 years	157	1.6
25 to 29 years	208	2.1
30 to 34 years	262	2.6
35 to 39 years	263	2.6
40 to 44 years	282	2.8
45 to 49 years	431	4.3
50 to 54 years	520	5.2
55 to 59 years	453	4.5
60 to 64 years	419	4.2
65 to 69 years	287	2.8
70 to 74 years	231	2.3
75 to 79 years	155	1.5
80 to 84 years	149	1.5
85 years and over	135	1.3
Median age (years)	48.3	( X )
16 years and over	4,161	41.3
18 years and over	4,026	39.9
21 years and over	3,923	38.9
62 years and over	1,202	11.9
65 years and over	957	9.5
A-E		
Total population	10,078	100.0
White	9,977	99.0
Black	9,793	97.2
Black or African American	33	0.3
American Indian and Alaska Native	84	0.8
Asian	22	0.2
Asian Indian	1	0.0
Chinese	4	0.0
Philippino	3	0.0
Japanese	6	0.1
Korean	3	0.0
Vietnamese	1	0.0
Other Asian 1	4	0.0
Native Hawaiian and Other Pacific Islander	3	0.0
Native Hawaiian	2	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander 2	1	0.0
Some other race	42	0.4
Two or More Races	101	1.0
White American Indian and Alaska Native 3	64	0.6
White Asian 3	8	0.1
White Black or African American 3	10	0.1
White Some other race 3	8	0.1
Race alone or in combination with one or more other races 4		
White	9,891	98.1
Black or African American	50	0.5
American Indian and Alaska Native	152	1.5

Subject	Number	Percent
Asian	32	0.3
Native Hawaiian and Other Pacific Islander	7	0.1
Some other race	54	0.5
<b>SPANISH OR LATINO</b>		
Total population	10,078	100.0
Hispanic or Latino (of any race)	188	1.9
Mexican	112	1.1
Puerto Rican	17	0.2
Cuban	2	0.0
Other Hispanic or Latino (5)	57	0.6
Not Hispanic or Latino	9,890	98.1
<b>SPANISH OR LATINO AND AMERICAN BORN</b>		
Total population	10,078	100.0
Hispanic or Latino	188	1.9
White alone	125	1.2
Black or African American alone	3	0.0
American Indian and Alaska Native alone	8	0.1
Asian alone	0	0.0
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some other race alone	40	0.4
Two or More races	12	0.1
Not Hispanic or Latino	9,890	98.1
White alone	9,668	95.9
Black or African American alone	30	0.3
American Indian and Alaska Native alone	76	0.8
Asian alone	22	0.2
Native Hawaiian and Other Pacific Islander alone	3	0.0
Some other race alone	2	0.0
Two or More races	89	0.9
<b>ETHNICITY</b>		
Total population	10,078	100.0
In household	10,025	99.5
Householder	4,571	45.4
Spouse (6)	2,441	24.2
Child	2,294	22.8
In child under 18 years	1,845	18.3
Other relatives	289	2.9
Under 18 years	114	1.1
65 years and over	52	0.5
Nonrelatives	430	4.3
Under 18 years	26	0.3
65 years and over	26	0.3
Unmarried partner	259	2.6
In group quarters	53	0.5
Institutionalized population	45	0.4
Male	19	0.2
Female	26	0.3
Noninstitutionalized population	8	0.1
Male	3	0.0
Female	5	0.0
<b>HOUSEHOLDS AND TENURE</b>		
Total household	4,571	100.0
Family household (families) (7)	2,884	63.1
With own children under 18 years	1,006	22.0
Husband-wife family	2,441	53.4
With own children under 18 years	762	16.7
Male householder, no wife present	162	3.5
With own children under 18 years	84	1.8
Female householder, no husband and present	281	6.1
With own children under 18 years	160	3.5

Subject	Number	Percent
Nonfamily househ <sup>o</sup> lds	1,687	36.9
Householder living alone	1,426	31.2
Male	737	16.1
65 years and over	209	4.6
Female	689	15.1
65 years and over	325	7.1
Households of individuals under 18 years	1,081	23.6
Households of individuals 65 years and over	1,349	29.5
Average household size	2.19	(X)
Average family size	2.74	(X)
<b>US NG UAN</b>		
Total housing units	6,441	100.0
Occupied housing units	4,571	71.0
Vacant housing units	1,870	29.0
For rent	132	2.0
Empty, not occupied	11	0.2
For sale only	97	1.5
Sold, not occupied	17	0.3
For seasonal, recreational, or occasional use	1,379	21.4
All other variants	234	3.6
Owner vacancy rate (percent)	2.7	(X)
Rental vacancy rate (percent)	10.6	(X)
<b>US NG TENU</b>		
Occupied housing units	4,571	100.0
Owner-occupied housing units	3,471	75.9
Population in owner-occupied housing units	7,736	(X)
Average household size of owner-occupied units	2.23	(X)
Renter-occupied housing units	1,100	24.1
Population in renter-occupied housing units	2,289	(X)
Average household size of renter-occupied units	2.08	(X)

X Not applicable.

1 Other Asian alone, or two or more Asian categories.

2 Other Pacific Islander alone, or two or more Native Hawaiian and other Pacific Islander categories.

3 One of the four most commonly reported multiple-race combinations nationwide in census 2000.

4 In combination with one or more of the other rates listed. The sum may add to more than the total population, and the percentages may add to more than 100 percent because individuals may report more than one race.

5 This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as Latino or Hispanic.

6 Spouse represents spouse of the householder. It does not reflect all spouses in a household. Responses of same-sex spouse were edited during processing to unmarried partner.

7 Family households consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. Nonfamily households consist of people living alone and households that do not have any members related to the householder.

8 The owner vacancy rate is the proportion of the owner inventory that is vacant for sale. It is computed by dividing the total number of vacant units for sale only by the sum of owner-occupied units, vacant units that are for sale only, and vacant units that have been sold but not yet occupied and then multiplying by 100.

9 The rental vacancy rate is the proportion of the rental inventory that is vacant for rent. It is computed by dividing the total number of vacant units for rent by the sum of the renter-occupied units, vacant units that are for rent, and vacant units that have been rented but not yet occupied and then multiplying by 100.

Source: U.S. Census Bureau, 2010 census.



U.S. Census Bureau  
Fast Facts for Congress

MAIN GLOSSARY FAQ HELP FEEDBACK DOWNLOAD

Table 14. Income and Poverty in 2009: Selected Data Set  
Census 2000 Summary File 3 (S3) Sample Data  
Geographic Area: Montana County

Data based on a sample except in 3, 4, 13, and 14. For information on confidentiality protection, sampling error, nonsampling error, definitions, and other corrections see <http://factfinder.census.gov/output/en/datanotes/enpsf3.pdf>.

Geographic area	Median income in 2009		Per capita income in 2009	Median earnings in 2009		Income in 2009 below poverty level			
	Household	Family		Male	Female	Percent of population or whom poverty status is determined			
	Age 18 and over	Age 18 and over		Age 18 and over	Age 18 and over	Under 18	18 to 64	65 and over	Total
Montana	33,024	40,487	17,151	30,503	20,914	14.6	18.4	9.1	10.5
<b>County</b>									
Beaverhead County	28,962	38,971	15,621	26,162	18,115	17.1	20.3	12.2	12.8
Bighorn County	27,684	31,095	10,792	23,814	18,884	29.2	37.0	20.1	23.7
Blaine County	25,247	30,616	12,101	23,627	20,469	28.1	36.5	19.9	23.4
Broadwater County	32,689	36,524	16,237	28,495	19,500	10.8	13.7	7.9	7.6
<b>Carbon County</b>	<b>32,139</b>	<b>38,405</b>	<b>17,204</b>	<b>30,226</b>	<b>19,945</b>	<b>11.6</b>	<b>14.3</b>	<b>8.8</b>	<b>8.2</b>
Carter County	26,313	32,262	13,280	21,466	15,703	18.1	16.2	16.4	15.9
Cascade County	32,971	39,949	17,566	28,993	20,970	13.5	18.6	8.4	10.4
Couteau County	29,150	32,399	14,851	22,080	19,318	20.5	29.3	8.4	16.5
Custer County	30,000	38,779	15,876	27,857	18,343	15.1	18.1	9.1	10.1
Daniels County	27,306	35,722	16,055	24,405	18,421	16.9	19.2	13.2	13.4
Dawson County	31,393	38,455	15,368	29,487	18,929	14.9	18.7	11.2	11.7
Deer Lodge County	26,305	36,158	15,580	27,230	18,719	15.8	21.4	9.8	11.6
Fallon County	29,944	38,636	16,014	27,045	18,077	12.5	17.5	6.6	9.5
Fergus County	30,409	36,609	15,808	27,260	18,138	15.4	19.4	12.2	10.6
Flathead County	34,466	40,702	18,112	31,908	20,619	13.0	16.7	8.6	9.4
Gallatin County	38,120	46,639	19,074	30,866	21,330	12.8	10.5	5.6	6.3
Garfield County	25,917	31,111	13,930	20,474	14,531	21.5	27.9	17.4	16.7
Glaacier County	27,921	31,193	11,597	27,445	23,036	27.3	32.7	20.1	23.5
Golden Valley County	27,308	35,000	13,573	14,028	19,063	25.8	20.4	21.6	16.5
Granite County	27,813	33,485	16,636	26,250	17,961	16.8	24.2	8.5	13.9
Hill County	30,781	38,179	14,935	29,908	19,874	18.4	23.3	9.0	15.3
Jefferson County	41,506	48,912	18,250	34,753	25,011	9.0	10.4	9.6	6.7
Judith Basin County	29,241	34,243	14,291	21,789	14,615	21.1	30.6	13.3	16.3
Lake County	28,740	34,033	15,173	27,009	19,162	18.7	24.2	8.3	14.0
Lewis and Clark County	37,360	46,766	18,763	33,515	23,961	10.9	12.6	6.5	7.3
Liberity County	30,284	37,361	14,882	23,158	16,579	20.3	28.9	15.5	19.0
Lincoln County	26,754	31,784	13,923	30,299	20,600	19.2	26.4	10.8	14.2
Minotone County	29,718	35,887	15,162	22,768	15,368	16.8	19.4	11.2	14.1
Madison County	30,233	35,536	16,944	26,606	17,917	12.1	14.2	9.3	10.2
Meagher County	29,375	33,879	15,019	22,083	15,417	18.9	27.4	13.0	16.4
Mineral County	27,143	32,096	15,166	26,782	18,258	15.8	18.7	8.5	12.8
Missoula County	34,454	44,865	17,808	31,605	21,720	14.8	14.6	8.2	8.8
Musselshell County	25,527	32,298	15,389	25,000	17,813	19.9	31.7	10.5	13.0
Nevada County	31,739	40,561	17,704	28,215	19,973	11.4	13.1	10.1	7.2
Nevada County	24,107	32,667	15,986	20,694	17,188	23.2	25.6	17.3	21.0
Ochiltree County	28,702	37,529	15,058	25,132	20,274	18.3	23.1	12.1	13.8
Pondera County	30,464	36,484	14,276	27,125	19,314	18.8	23.4	8.3	15.0
Pondera River County	28,398	34,671	15,351	23,971	17,411	12.9	12.7	16.3	9.9
Powell County	30,625	35,836	13,816	26,366	20,457	12.6	16.2	6.0	10.2
Prairie County	25,451	32,292	14,422	22,424	18,833	17.2	23.6	15.5	13.3

Geographic area	Median income in 2000 dollars		Per capita income in 2000	Median earnings in full-time, year-round work in 2000 dollars		Income in 2000 below poverty level			
	Household	Family		Male	Female	Percent of population or below poverty status determined			Percent of children under 18 years of age
						Age 0-17	18-64	65+	
Idaho County	31,992	38,397	17,935	30,994	19,987	13.8	20.1	6.3	9.6
Blaine County	32,110	39,348	16,006	29,069	19,203	12.2	13.9	9.0	8.1
Cook County	24,834	27,833	11,347	25,177	19,728	32.4	41.6	15.1	27.6
Gooding County	35,898	41,631	15,032	38,688	20,640	22.4	31.8	15.1	17.8
Sanders County	26,852	31,340	14,593	28,340	17,630	17.2	23.3	9.2	13.3
Sheridan County	29,518	35,345	16,038	23,053	20,112	14.7	16.4	15.8	10.6
Silver Lake County	30,402	40,018	17,009	31,295	21,610	14.9	19.2	8.9	10.7
Stillwater County	39,205	45,238	18,468	32,148	19,271	9.8	12.2	9.2	6.2
Sheep Grass County	32,422	38,750	17,880	28,385	17,245	11.4	15.1	9.1	9.0
Teton County	30,197	36,662	14,635	25,794	18,389	16.6	25.6	8.4	12.2
Toole County	30,169	39,600	14,731	27,284	19,141	12.9	15.0	9.5	9.7
Treasure County	29,830	34,219	14,392	22,750	17,188	14.7	22.8	11.1	8.5
Valley County	30,979	39,044	16,246	27,233	17,686	13.5	15.4	14.4	9.5
Wheatland County	24,492	32,500	11,954	14,185	15,000	20.4	16.0	15.5	11.1
Wilder County	28,224	34,265	16,121	22,750	18,667	15.3	18.7	12.6	8.6
Yellowstone County	36,727	45,277	19,303	33,475	21,566	11.1	14.5	7.4	8.5

(X) Not applicable.

Source: U.S. Census Bureau, Census 2000 Summary File 3, Tables S53, S77, S82, S87, S90, S447, and S452.



ARIZON NEW MEXICO

OKLAHOMA

ARKANSAS

TENNESSEE

NORTH CAROLINA

SOUTH CAROLINA

S1701

POVERTY STATUS IN THE PAST 12 MONTHS

2006-2010 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties.

Subject	Carbon County, Montana					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Marginal error	Estimate	Marginal error	Estimate	Marginal error
Population for poverty status is determined	9,818	/134	1,197	/303	12.2	/3.1
<b>AGE</b>						
Under 18 years	1,985	/119	280	/117	14.1	/5.7
Related children under 18 years	1,963	/122	258	/113	13.1	/5.6
18 to 64 years	6,108	/45	726	/204	11.9	/3.3
65 years and over	1,725	/61	191	/65	11.1	/3.7
<b>SEX</b>						
Male	4,956	/72	586	/188	11.8	/3.8
Female	4,862	/86	611	/154	12.6	/3.1
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>						
White race	9,778	/151	1,197	/303	12.2	/3.1
White alone, not Hispanic or Latino	9,589	/131	1,166	/298	12.2	/3.1
Black or African American	23	/23	0	/104	0.0	/54.2
American Indian and Alaska Native	89	/55	28	/28	31.5	/32.8
Asian	58	/43	0	/104	0.0	/33.4
Native Hawaiian and other Pacific Islander	0	/104	0	/104		
Some other race	19	/28	3	/7	15.8	/41.0
Two or more races	40	/43	0	/104	0.0	/41.1
Hispanic or Latino origin (of any race)	167	/104	3	/7	1.8	/4.3
White alone, not Hispanic or Latino	9,441	/129	1,166	/298	12.4	/3.1
<b>EDUCATIONAL ATTAINMENT</b>						
Population 25 years and over	7,306	/86	812	/207	11.1	/2.8
Less than high school graduate	620	/122	116	/45	18.7	/7.3
High school graduate (includes equivalency)	2,628	/216	415	/142	15.8	/5.1
Some college, associate's degree	1,969	/167	137	/59	7.0	/2.9
Bachelor's degree or higher	2,089	/233	144	/79	6.9	/3.7
<b>EMPLOYMENT STATUS</b>						
Civilian labor force 16 years and over	5,400	/177	496	/160	9.2	/3.0
Employed	5,196	/176	451	/153	8.7	/3.0
Male	2,786	/128	246	/127	8.8	/4.5
Female	2,410	/144	205	/71	8.5	/2.9
Unemployed	204	/66	45	/31	22.1	/13.8
Male	131	/52	35	/31	26.7	/19.6
Female	73	/43	10	/9	13.7	/14.1
<b>EXPERIENCE</b>						

Subject	Carbon County, Montana					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error
Population 16 years and over	8,134	±187	946	±229	11.6%	±2.8
Lived full time, year-round in the past 12 months	3,262	±256	134	±56	4.1%	±1.7
Lived part time or part year in the past 12 months	2,659	±221	428	±162	16.1%	±5.6
Did not live	2,213	±172	384	±112	17.4%	±4.9
All individuals below						
50 percent of poverty level	444	±146	(X)	(X)	(X)	(X)
125 percent of poverty level	1,528	±323	(X)	(X)	(X)	(X)
150 percent of poverty level	2,056	±385	(X)	(X)	(X)	(X)
185 percent of poverty level	2,708	±380	(X)	(X)	(X)	(X)
200 percent of poverty level	2,993	±362	(X)	(X)	(X)	(X)
Unrelated individuals for whom poverty status is determined	1,969	±298	552	±160	28.0%	±7.3
Male	1,048	±210	265	±128	25.3%	±11.3
Female	921	±137	287	±88	31.2%	±7.6
Mean income for unrelated individuals (dollars)	2,260	±669	(X)	(X)	(X)	(X)
Lived full time, year-round in the past 12 months	655	±144	78	±42	11.9%	±5.9
Lived less than full time, year-round in the past 12 months	782	±221	308	±139	39.4%	±13.5
Did not live	532	±94	166	±61	31.2%	±10.4
PERCENT IMPUTED						
Poverty status for individuals	35.2%	(X)	(X)	(X)	(X)	(X)

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the AQS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on census 2000 data. Boundaries for urban areas have not been updated since census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

#### Explanation of Symbols

- An entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- An entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
- An entry following a median estimate means the median falls in the lowest interval of an open-ended distribution.
- An entry following a median estimate means the median falls in the upper interval of an open-ended distribution.
- An entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
- An entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- An N entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
- An (X) means that the estimate is not applicable or not available.



001

Profile of General Population and Housing Characteristics 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/2010/doc/dpsf.pdf>.

**Geography: Montana**

Subject	Number	Percent
<b>SEX AND AGE</b>		
Total population	989,415	100.0
Under 5 years	62,423	6.3
5 to 9 years	60,765	6.1
10 to 14 years	61,124	6.2
15 to 19 years	66,724	6.7
20 to 24 years	67,138	6.8
25 to 29 years	64,123	6.5
30 to 34 years	58,741	5.9
35 to 39 years	55,575	5.6
40 to 44 years	57,370	5.8
45 to 49 years	71,021	7.2
50 to 54 years	78,811	8.0
55 to 59 years	75,915	7.7
60 to 64 years	62,943	6.4
65 to 69 years	46,556	4.7
70 to 74 years	34,186	3.5
75 to 79 years	25,637	2.6
80 to 84 years	20,342	2.1
85 years and over	20,021	2.0
Median age (years)	39.8	( X )
16 years and over	792,520	80.1
18 years and over	765,852	77.4
21 years and over	724,590	73.2
62 years and over	182,590	18.5
65 years and over	146,742	14.8
Male population	496,667	50.2
Under 5 years	32,129	3.2
5 to 9 years	30,932	3.1
10 to 14 years	31,620	3.2
15 to 19 years	34,515	3.5
20 to 24 years	34,939	3.5
25 to 29 years	33,135	3.3
30 to 34 years	30,209	3.1
35 to 39 years	28,355	2.9
40 to 44 years	28,848	2.9
45 to 49 years	35,234	3.6
50 to 54 years	38,747	3.9
55 to 59 years	37,835	3.8
60 to 64 years	32,124	3.2
65 to 69 years	23,455	2.4
70 to 74 years	16,806	1.7
75 to 79 years	11,987	1.2
80 to 84 years	8,781	0.9
85 years and over	7,016	0.7

Subject	Number	Percent
Median age (years)	38.8	( X )
16 years and over	395,598	40.0
18 years and over	381,758	38.6
21 years and over	360,372	36.4
62 years and over	86,385	8.7
65 years and over	68,045	6.9
Female population	492,748	49.8
Under 5 years	30,294	3.1
5 to 9 years	29,833	3.0
10 to 14 years	29,504	3.0
15 to 19 years	32,209	3.3
20 to 24 years	32,199	3.3
25 to 29 years	30,988	3.1
30 to 34 years	28,532	2.9
35 to 39 years	27,220	2.8
40 to 44 years	28,522	2.9
45 to 49 years	35,787	3.6
50 to 54 years	40,064	4.0
55 to 59 years	38,080	3.8
60 to 64 years	30,819	3.1
65 to 69 years	23,101	2.3
70 to 74 years	17,380	1.8
75 to 79 years	13,650	1.4
80 to 84 years	11,561	1.2
85 years and over	13,005	1.3
Median age (years)	41.0	( X )
16 years and over	396,922	40.1
18 years and over	384,094	38.8
21 years and over	364,218	36.8
62 years and over	96,205	9.7
65 years and over	78,697	8.0
AGE		
Total population	989,415	100.0
Female	964,439	97.5
White	884,961	89.4
Black or African American	4,027	0.4
American Indian and Alaska Native	62,555	6.3
Asian	6,253	0.6
Asian Indian	618	0.1
Chinese	1,286	0.1
Philippino	1,383	0.1
Japanese	850	0.1
Korean	837	0.1
Vietnamese	297	0.0
Other Asian 1	982	0.1
Native Hawaiian and Other Pacific Islander	668	0.1
Native Hawaiian	295	0.0
Guamanian or Chamorro	107	0.0
Samoan	123	0.0
Other Pacific Islander 2	143	0.0
Some other race	5,975	0.6
Two or More Races	24,976	2.5
White American Indian and Alaska Native 3	14,228	1.4
White Asian 3	3,233	0.3
White Black or African American 3	2,578	0.3
White Some other race 3	1,864	0.2
Race alone or in combination with one or more other races 4		
White	908,645	91.8
Black or African American	7,917	0.8
American Indian and Alaska Native	78,601	7.9

Subject	Number	Percent
Asian	10,482	1.1
Native Hawaiian and Other Pacific Islander	1,732	0.2
Some other race	8,434	0.9
<b>SPANISH OR LATINO</b>		
Total population	989,415	100.0
Hispanic or Latino (of any race)	28,565	2.9
Mexican	20,048	2.0
Puerto Rican	1,491	0.2
Cuban	421	0.0
Other Hispanic or Latino (5)	6,605	0.7
Not Hispanic or Latino	960,850	97.1
<b>SPANISH OR LATINO AND ASIAN</b>		
Total population	989,415	100.0
Hispanic or Latino	28,565	2.9
White alone	16,333	1.7
Black or African American alone	284	0.0
American Indian and Alaska Native alone	2,653	0.3
Asian alone	115	0.0
Native Hawaiian and Other Pacific Islander alone	59	0.0
Some other race alone	5,435	0.5
Two or More races	3,686	0.4
Not Hispanic or Latino	960,850	97.1
White alone	868,628	87.8
Black or African American alone	3,743	0.4
American Indian and Alaska Native alone	59,902	6.1
Asian alone	6,138	0.6
Native Hawaiian and Other Pacific Islander alone	609	0.1
Some other race alone	540	0.1
Two or More races	21,290	2.2
<b>ETHNICITY</b>		
Total population	989,415	100.0
In household	960,566	97.1
Household	409,607	41.4
Spouse (6)	201,611	20.4
Child	250,732	25.3
In child under 18 years	199,586	20.2
Other relatives	38,083	3.8
Under 18 years	17,018	1.7
65 years and over	4,713	0.5
Nonrelatives	60,533	6.1
Under 18 years	3,979	0.4
65 years and over	2,564	0.3
Unmarried partner	27,484	2.8
In group quarters	28,849	2.9
Institutionalized population	11,929	1.2
Male	7,289	0.7
Female	4,640	0.5
Noninstitutionalized population	16,920	1.7
Male	9,238	0.9
Female	7,682	0.8
<b>HOUSEHOLDS AND TRUSTS</b>		
Total household	409,607	100.0
Family household (families) (7)	257,087	62.8
It own children under 18 years	106,102	25.9
Husband-wife family	201,611	49.2
It own children under 18 years	73,017	17.8
Male household, no wife present	18,431	4.5
It own children under 18 years	10,799	2.6
Female household, no husband and present	37,045	9.0
It own children under 18 years	22,286	5.4

Subject	Number	Percent
Nonfamily househ <sup>o</sup> lds (7)	152,520	37.2
Householder living alone	121,775	29.7
Male	59,524	14.5
65 years and over	14,783	3.6
Female	62,251	15.2
65 years and over	29,167	7.1
Households of individuals under 18 years	116,376	28.4
Households of individuals 65 years and over	104,994	25.6
Average household size	2.35	(X)
Average family size (7)	2.91	(X)
<b>US NG UAN</b>		
Total housing units	482,825	100.0
Occupied housing units	409,607	84.8
Vacant housing units	73,218	15.2
For rent	10,082	2.1
Empty, not occupied	773	0.2
For sale only	5,964	1.2
Sold, not occupied	1,353	0.3
For seasonal, recreational, or occasional use	38,510	8.0
All other vacancies	16,536	3.4
Owner vacancy rate (percent) (8)	2.1	(X)
Rental vacancy rate (percent) (9)	7.1	(X)
<b>US NG TENU</b>		
Occupied housing units	409,607	100.0
Owner-occupied housing units	278,418	68.0
Population in owner-occupied housing units	674,535	(X)
Average household size of owner-occupied units	2.42	(X)
Renter-occupied housing units	131,189	32.0
Population in renter-occupied housing units	286,031	(X)
Average household size of renter-occupied units	2.18	(X)

X Not applicable.

1 Other Asian alone, or two or more Asian categories.

2 Other Pacific Islander alone, or two or more Native Hawaiian and other Pacific Islander categories.

3 One of the four most common only reported multiple race combinations nationwide in census 2000.

4 In combination with one or more of the other rates listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

5 This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as Latino or Hispanic.

6 Spouse represents spouse of the householder. It does not reflect all spouses in a household. Responses of same-sex spouse were edited during processing to unmarried partner.

7 Nonfamily households consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. Nonfamily households consist of people living alone and households that do not have any other persons related to the householder.

8 The owner vacancy rate is the proportion of the owner inventory that is vacant for sale. It is computed by dividing the total number of vacant units for sale only by the sum of owner-occupied units, vacant units that are for sale only, and vacant units that have been sold but not yet occupied and then multiplying by 100.

9 The rental vacancy rate is the proportion of the rental inventory that is vacant for rent. It is computed by dividing the total number of vacant units for rent by the sum of the renter-occupied units, vacant units that are for rent, and vacant units that have been rented but not yet occupied and then multiplying by 100.

Source: U.S. Census Bureau, 2010 census.