SUMMARY OF THE NEW WORLD PROJECT

Location

The proposed New World mine is located approximately 2.5 miles north of Cooke City in Park County, Montana, and about three miles east of the northeast corner of Yellowstone National Park. The Absaroka-Beartooth wilderness area lies about two miles to the north and east. The New World Mining District was specifically excluded from this wilderness area by geologists with the U.S. Geological Survey and by Congressional action (1978) because of its historical mineral production and its potential for future mineral development, which is considered to be of national significance.

Land Ownership

Patented mining claims are owned or leased by Crown Butte Mines, Inc.; while unpatented lode mining claims and mill site claims are on lands administered by the U.S. Forest Service. Approximately 10 percent of the minable ore reserves and about 85 percent of the proposed surface facilities are located on federal lands.

Ore Deposits

Ore deposits consists of two underground gold-copper-silver-bearing, massive sulfide, replacement deposits in Cambrian sedimentary formations and breccias adjacent to and within Eocene age intrusive rocks. Property-wide geologic reserves are currently projected as 8,000,000 tons, minable reserve calculations are incomplete.

Development Plan

The development would include an underground mine, mine backfill facilities, a 1,200 to 1,800 ton-per-day gravity separation and floatation mill, tailing impoundment, water treatment facilities, and a worker camp. All facilities are to be located in the Fisher Creek valley, a tributary of the Clarks Fork of the Yellowstone River (which does not flow into or towards Yellowstone National Park). Maximum total surface area to be disturbed is about 185 acres. No surface mining is proposed. No cyanide will be used in the milling process.

Operating Plan

A 10-15 year mine life is projected, with year around employment of 175 people, including mine, mill, management, and support staff. An annual payroll of about seven million dollars is projected, and annual expenditures for "goods and services" will add an additional seven million dollars to the local economies. About 80 secondary jobs will be generated in nearby communities in support of this proposed mining operation.

Metal Production

On-site gold-bullion production; and production of a copper-gold-silver concentrate to be hauled (2-3 truck loads/day) to a rail link in Cody or Powell, Wyoming, where it will be shipped to a commercial smelter for processing.

Power

Proposed upgrade from 24kV to 69kV of 65 miles of transmission line along the existing power line and right-of-way from Cooke City, Montana, to Cody, Wyoming.

Project Schedule

Permit Application	submitted 11/90
Environmental Baseline Studies	completed 12/90
Permit Application	revised 10/92
Permit Application	approved as complete 4/93
Environmental Impact Statement	minimum 1 year, initiated 5/93
Construction mine and Mill	1-2 years
Operation and Production	10-15 years
Closure and Active Reclamation	4-5 years

Annual Taxes

Annual taxes to be paid, exclusive of federal and state income tax on gross revenues, include:

County Property Tax:	$685,000
State Metal Mines Tax, State Resource Indemnity Tax, Trust Tax:	$745,000
State School Tax:	$450,000
Payroll Tax:	$455,000

Reclamation

Site reclamation will occur in compliance with all state and federal laws and regulations. All mine-related structures will be removed, areas re-contoured, topsoil replaced, and disturbed areas re-vegetated. All re-vegetation in areas of disturbances at the mine and facilities sites will occur at elevations at or below 9,050 feet. Experimental reclamation and revegetation research has been conducted at high elevations in this district by the U.S. Forest Service Intermountain Research Station, Logan, Utah, (Dr. Ray Brown) under much more severe conditions than those of the proposed mine site (at elevations between 9,400 and 10,200 feet in very acidic soils) over the last 22 years. The results of this reclamation and revegetation research is considered to have been quite successful. Reclamation bonding is currently in place for all past exploration activities, and will be required to guarantee reclamation following mine closure. Water quality and fisheries in the area will be improved by treating contaminated waters from historical mining operations and stabilizing historic mine workings and wastes. Reclamation and revegetation of pre-existing historically disturbed mining sites is already underway.

Regulatory Agencies

Lead Agencies

Montana Department of State Lands
Mike DaSilva
1625 11th Ave.
Helena, MT 59620

Gallatin National Forest
Sherm Sollid
P.O. Box 130
Bozeman, MT 59771

Cooperating Agencies

Custer National Forest
Montana Water Quality Bureau
Shoshone National Forest
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
Yellowstone National Park

For additional information about the New World Project, call or write:

Crown Butte Mines, Inc.
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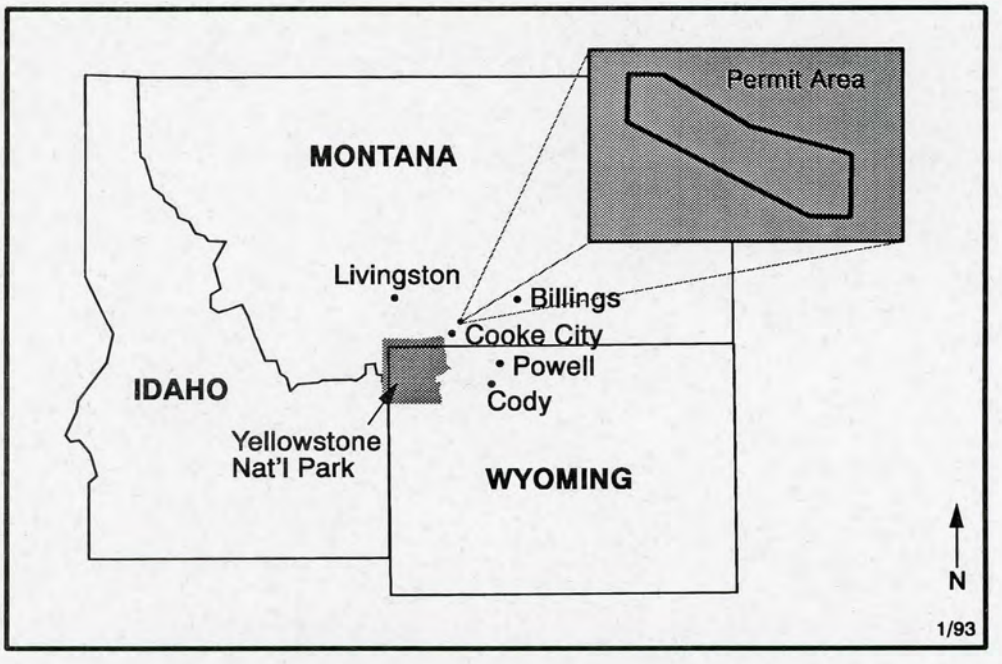
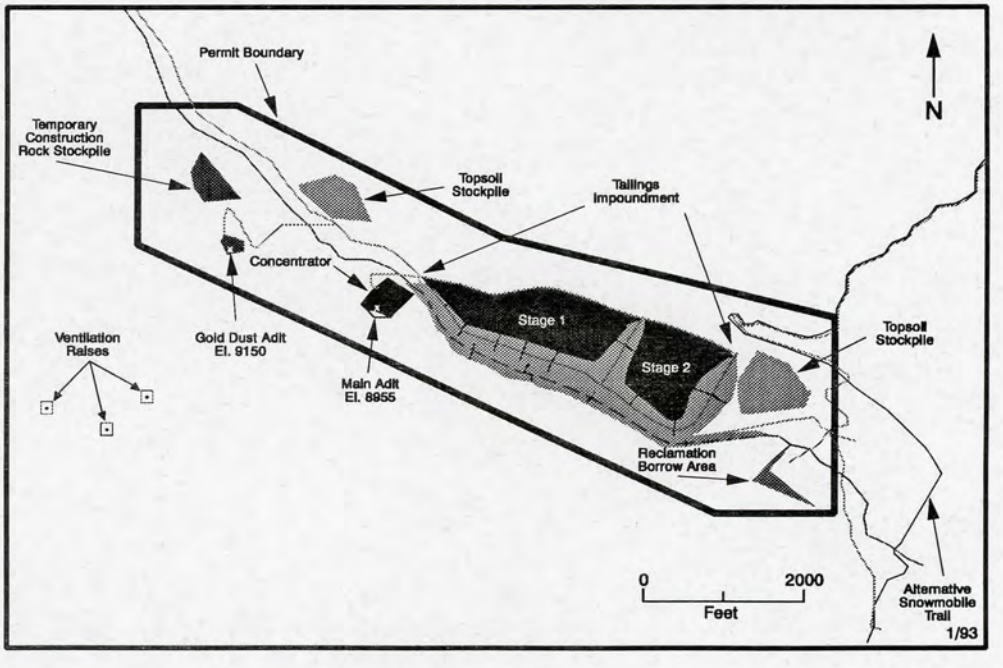
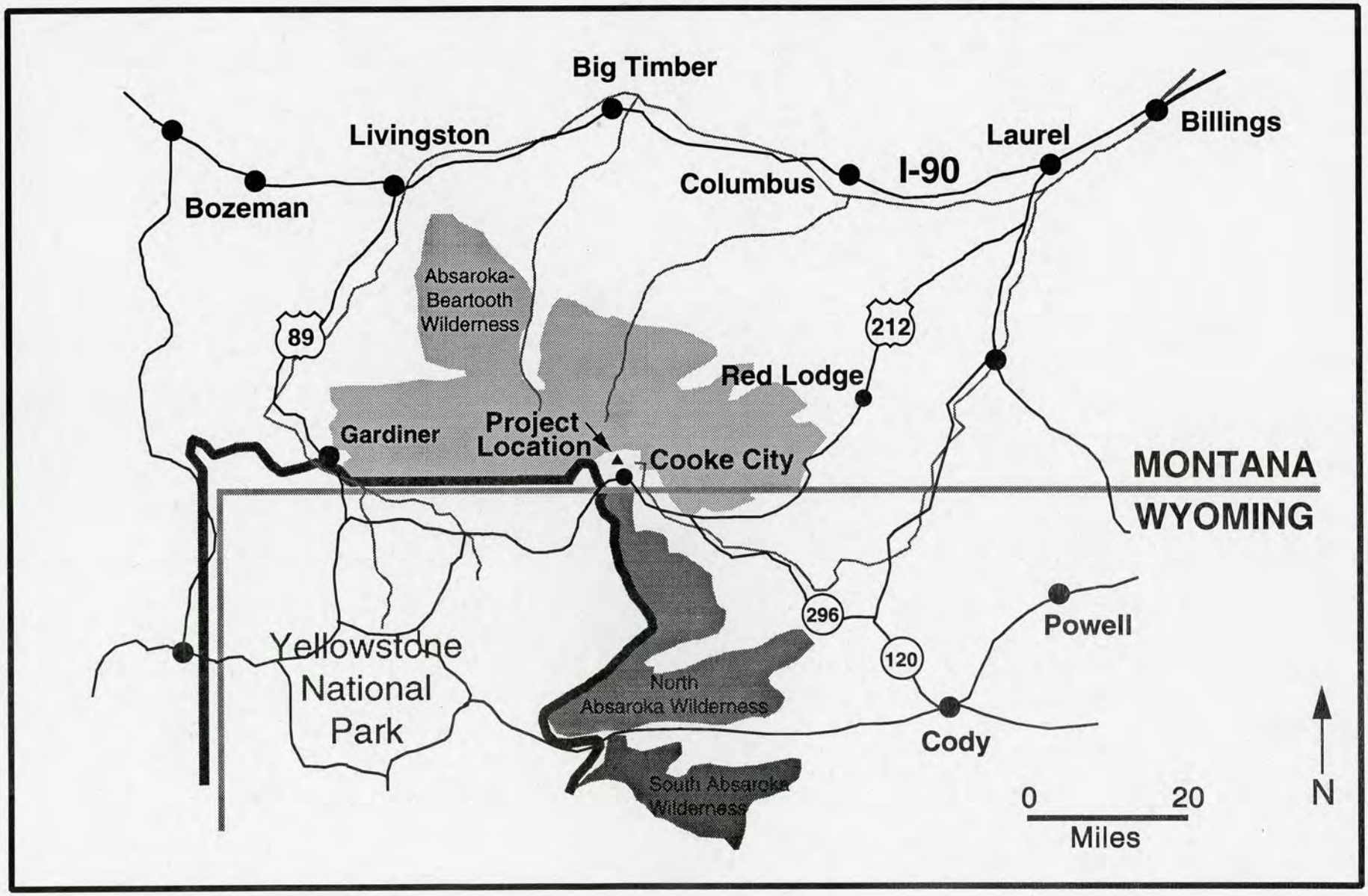
Each agency has jurisdiction over specific aspects of the project and require submittal of detailed information and, in some cases, performance bonds. In all, more than 35 separate federal and state permits will be required prior to permit approval, mine construction, and operation.

NEW WORLD PROJECT





NEW WORLD PROJECT



IMPACTS OF PROPOSED NEW WORLD PROJECT MINE ON YELLOWSTONE NATIONALPARK ARE EXPECTED TO BE MINIMAL

SUMMARY

Impacts to Yellowstone National Park (YNP) that result from Crown Butte Mines' New World Project proposed mine are expected to be minimal. With respect to issues that are perceived to be the most important, for example, air and water quality, and visual, noise and night-light pollution, the actual impact is expected to be insignificant. This results from a carefully designed mine plan that includes selection of the Fisher Creek valley for surface facilities which takes advantage of natural topographic barriers, and care in the selection of specific individual sites for the construction of required facilities. Other envisioned or potential impacts to YNP, such as increased traffic, access, recreational use, and the cumulative effects of local population growth are being evaluated in the Environmental Impact Study and are expected to be minor.

THE PLAN

Crown Butte proposes to extract gold, copper and silver by underground mining of two separate deposits located under Henderson Mountain (map). Henderson Mountain lies to the southwest of the Fisher Creek valley, in which all proposed mine related facilities will be constructed. These facilities include underground mine access portals, mine back-fill facilities, a 1,200 to 1,800 ton-per-day gravity separation and flotation mill, tailing impoundment, water treatment plant, a small quarry, and a worker camp. Other small areas in the Fisher Creek valley have been designated for temporary stockpiles of waste rock and topsoil. Total surface disturbance is to be about 185 acres.

THE SETTING

All activities and facilities associated with this proposed mine will be in the Fisher Creek drainage, about three miles to the east of the northeast corner of Yellowstone National Park (YNP). The proposed mine area is comprised of both private and national forest lands, and is surrounded at a distance of about two miles to the west, north and east by the Absaroka-Beartooth Wilderness area. The exact location of the Wilderness boundary in this area was deliberately drawn, by US Government geologists, to exclude the New World District because of its potential for significant production of mineral resources.

THE IMPACTS

The potential impacts of the proposed mine on YNP are currently being evaluated by numerous state and federal agencies. The Gallatin National Forest and the Montana Department of State Lands have been designated as lead agencies. These agencies are responsible for an Environmental Impact Statement (EIS), prepared by a "Third Party - Independent Contractor" (ERO of Denver, Colorado), which will determine the impacts of the proposed mining activities. The EIS will also evaluate reasonable alternatives to the proposed plan and their potential impacts. The final results of this impact analysis will likely not be available before the fall of 1994.

On issues perceived to be critical with respect to YNP the currently proposed mine plan is expected to be shown to have "no significant impacts." These issues include water quality, air quality, visual, noise, and night-lighting or glow. Minimal impacts are envisioned for other issues of less critical importance to YNP and include seasonal increases in winter traffic, park access, and recreational use; and the effect of an increase in local population.

Water Quality:

All mining activity and constructed facilities required for this proposed mine project will be located in the Fisher Creek drainage about three miles to the east of the northeast corner of YNP (map). Fisher Creek flows to the southeast, away from, not toward, the Park, and is a tributary of the Clarks Fork of the Yellowstone River. The EIS study now in progress will identify and evaluate the impacts resulting from these facilities, at the both the company's preferred site and at alternative sites. It is assumed that the potential impacts of constructed facilities on the waters of YNP will be given utmost consideration during site selection. In addition, the State of Montana has stringent water quality

standard for waters of Montana, as does the Federal Government for waters that flow into national parks or wilderness areas. Current and on-going remedial clean-up of historical mining sites are expected to favorably impact existing degraded water quality in the area, and will be a benefit of this proposed mining operation. Crown Butte's New World mine will provide the physical and financial means to affect this clean-up.

Air Quality:

Air quality standards are set by the federal "Clean Air Act" and Montana State law. Allowable emissions will be evaluated as part of the EIS and air quality requirements determined as part of the permitting process.

Visual, Noise, Night-lighting or Glow:

The location of all proposed facilities in the Fisher Creek valley, at elevations of 9,050 feet or less, and the prominent ridge-lines of Henderson, Fisher, and Miller Mountains (10,200 feet) precludes observation of the mine from YNP, and minimizes the affect of noise and night-glow from the proposed mine site.

Traffic, Park Access, and Increased Recreational Use:

Overall the project will cause little disruption of traffic flow and area visitor experiences can expect to be about the same. Seasonal highway access to the project area is possible by three routes: through YNP, via Gardiner, Montana, and Mammoth, Wyoming; from Red Lodge, Montana, over the Beartooth Highway; and via Wyoming State Highway 296 and US Highway 212 from north of Cody, Wyoming. Only the access from Cody is viable for the project, as commercial hauling through YNP is prohibited, and access over the Beartooth Highway has restrictions for commercial traffic and is plowed only seasonally (June-October). The access from Cody, Wyoming, is also currently seasonal, as the last eight miles from Cooke City eastward is not plowed from mid-November to late April. This route will need to be plowed for year-around access to the project site, and plowing this road will also allow access to YNP via the northeast entrance on a year-around basis. As such, there will be some seasonal increase in traffic, access, and recreational use of YNP by winter visitors using this entrance.

Effect of Increase in Population:

The effect of increase in population in the Cooke Pass-Silvergate corridor resulting from the proposed mine should be very small, only nine management employees and their families are expected to move into the area. Other mine employees (175) and construction workers (peak of 350) will be required to live in a workers camp and will be prohibited from purchasing property as a residence in the Sunlight Basin-Silvergate corridor. Worker's schedules will be 8-12 hours per day with a certain number of days on and off the job (in and out of the camp).

For additional information about impacts of the New World Project, call or write:

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RECREATIONAL USE IN THE VICINITY OF THE NEW WORLD PROJECT AREA

The Cooke City area offers a variety of year around recreational activities. Outdoor activities range from the more traditional - hunting, fishing, hiking, camping, picnicking, and sightseeing - to the more adventurous - back-packing, mountain biking, snowmobiling, Nordic skiing, jeeping, and four wheeling.

None of these activities will be significantly impacted or limited by the New World Project proposed mine, and in fact some of the recreational opportunities will be enhanced by mine related projects.

Back-country use for hiking, camping, fishing, and backpacking throughout the area begins in mid-June and runs through September or early October. Three popular trails in this area are the Lady of the Lake Trail, the Lake Abundance Foot and Jeep Trail, and the Goose Lake-Grasshopper Glacier Trail. All access to existing trails will be maintained and some will be improved. A new trail-head is proposed for construction by Crown Butte Mines for the Lady of the Lake access and modifications to the Lake Abundance trail-head are being considered.

Jeeping, four-wheeling, and mountain biking generally takes place on many of the pre-existing mine roads and trails. Peak usage occurs between mid-July and the end of September, depending on snow and other access conditions. Once again no restrictions on access to these roads and trails is anticipated.

Cooke City lies near one of the few areas in Montana that permit an early elk hunting season from September 15th until the regular season begins at the end of October. The regular season runs through November; however, most elk hunting activity in the area occurs during this early season. Daisy Pass is a starting point for outfitters and hunters using nearby trails to access the back-country. A large number of vehicles and horse-trailers are usually parked along the Daisy Pass and Miller Creek roads during this hunting season. Project activities related to mining will have no effect on the access to trail-heads for back country outfitters or hunters, as there will be no mining activity on the Daisy Pass side of Henderson Mountain. Some improvements to road-side turnouts and parking areas are anticipated.

There are over 60 miles of groomed snowmobile trails in the Cooke City area. Peak usage occurs over the Christmas - New Years holiday and during February and March. Snowmobilers coming into this area from Wyoming park their trucks and trailers just short of the Montana border at the Pilot Creek trail head in Wyoming. From there they use the unplowed highway (US 212) to snowmobile to Cooke City about eight miles away. This portion of the highway will need to be plowed on a year around basis once mining construction and mining operations begin, necessitating the re-routing of over-snow access from Pilot Creek to Cooke City. The Forest Service is considering alternative routes whereby snowmobilers will still be able to park at Pilot Creek and ride into Cooke City or up onto the Beartooth Plateau.

Plowing of US Highway 212 will permit year around access to Yellowstone National Park from the west through Wyoming. This road has been seasonally closed from mid-November to mid-March in the past. Opening this road on a year around basis will permit access for winter recreationalists via the northeast entrance for travel to the Mammoth Hot Springs area, or cross-country skiing in the northeast portions of the Park. At the present time, all access into the Park, toward Cooke City, must come through the north entrance at Gardiner, Montana, and then through Mammoth Hot Springs and Tower Junction within the Park.

One of the more popular snowmobile trails in the Cooke City area is the Daisy Pass-Lulu Pass loop trail. This trail will be relocated in the Fisher Creek Flats area where the trail will run along side the proposed tailing impoundment for the mine. The trail relocation will in no way hamper access to the areas above or below the actual project site.

There are no groomed Nordic or cross-country ski trails in the vicinity of the project area. Occasional use is made of fine ski slopes on the northeast side of Fisher Mountain, south of Lulu Pass. Once again access to this unofficial ski area will not be impaired.

Fishing opportunities downstream of the proposed mine site should improve over what they are today as the water quality in Fisher Creek is improved by treatment of historical mine and naturally degraded drainage waters.

There are no "dude" ranches in the Project area. The nearest lie about 20 miles away in the Crandall and Sunlight Basin area. Guests at these ranches use the streams and valleys adjacent to these ranches for various recreational activities. The ranches themselves are used as a base of operations for fishing along the Clarks Fork River or trips into Yellowstone Park.

Sightseers will not be able to see any of the proposed project's facilities from the local area highways or the many campgrounds and picnic areas within the surrounding National Forests. The project area is however visible from the fire tower located at the Clay Butte Overlook along the Beartooth Highway some 30 miles to the east. Indeed, tourists or sightseers will have to drive right up into the project area in Fisher Creek before any of the facilities will be visible.

For those interested in learning more about the mine, mine tours are a likely possibility. Throughout the country, mines have attracted a fair number of visitors and mine tours are a likely possibility at New World.

For additional information about recreation on the New World Project, call or write:

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THE RICH HISTORY OF THE NEW WORLD DISTRICT

"People return to Cooke City every summer to work claims. Many of these faithful pilgrims, both men and women, believe that the days of big production will come."

--Billings Gazette, December 21,1952

As early as the 1860s, the lure of gold brought men into the upper Yellowstone region. In 1864, a party of 30 men under the direction of George A. Houston traveled up the Yellowstone River. Upon reaching the Lamar River, the group split up into smaller prospecting parties and fanned out in all directions. One of these parties traveled east, eventually reaching the head of Soda Butte creek. At this point, they were attacked by Arapaho Indians, who drove off their stock. Retreating from the area, these men were probably the first prospectors to explore the region that was later to be known as the New World District.

In the fall of 1869, Adam "Horn" Miller, a member of an earlier expedition, set about organizing a prospecting party after hearing rumors of rich lead, silver, and gold deposits. Accompanying Miller were J.H. Moore, A. Bart Henderson, and James Gourley. In the late spring of 1870, the party left the Crow Agency at Fort Parker (approximately 7 miles east of present day Livingston) and traveled through the northeast corner of Yellowstone Park to Lake Abundance. Descending the Clarks Fork river, Miller discovered gold in either Soda Butte Creek or the Clarks Fork, but due to Indian hostilities, the party was forced to return to the Agency. The following summer, the original party (except Henderson) returned and staked additional claims on Henderson and Miller Mountains. Although the area was part of the Crow reservation, a steady stream of prospectors soon flowed into the area and established a mining camp, with most of the activity occurring on Miller and Republic mountains.

In 1875, a Mexican furnace was built to smelt ore from Miller Mountain. The following year, the Eastern Montana Mining and Smelting Company constructed a smelter and successfully reduced 80 tons of silver-lead ore to 30 tons of bullion in 1877. Also, at this time, Chief Joseph and his band of Nez Perce were being pursued by government troops. In their flight to Canada, it is believed that the Nez Perce passed through the area and raided the smelter, taking lead for use as shot.

News of the mineral deposits in this area attracted Eastern interest, and in 1880, Jay Cooke, Jr., a Northern Pacific railroad contractor and son of a Philadelphia financier, placed $5,000 down in a bond arrangement with George Houston for the Republic property. While visiting the property holdings, Cooke vowed to build a railroad, and the mining camp was named "Cooke City" in his honor. However, a financial panic later swept the east, and the banking firm of Jay Cooke & Company went down in the crash. Short of capital, Cooke was forced to forfeit the bond payment and the Republic property reverted back to Houston.

Republic smelter, 1906.

On April 11, 1882, the Crow Indian reservation was reduced in size and the property in the Cooke City area was shifted to public domain status, allowing for the creation of the New World Mining District. Subsequently, a rush to the area began. Jack Allen, a Bozeman prospector, set out for Cooke driving a four-horse team, building the road as he progressed. From this time on, freight was transported by teams instead of pack horses, and the district developed rapidly. Major George Eaton formed the Republic Mining Company, investing $300,000 to develop mines and a smelter. After some initial setbacks, in 1885 the Republic smelter successfully produced 440 tons of silver-lead bullion which sold for $95,000. However, the profits were canceled out by the high cost of horse-drawn transportation. It was evident that cheaper haulage was needed, and an extension of the Northern Pacific railroad line through Yellowstone National Park from Cinnabar (presently Corwin Springs) to Cooke City seemed to be the most reasonable route.

During 1885, a right-of-way bill came before Congress to remove the needed area from the park. The bill passed the House but later failed in the Senate.

In 1886, the Republic mine and smelter shut down, and with this closing came a slowdown of mining activity in the New World District. Mining of gold ore in the Daisy and Homestake claims and activity on the Alice E. property continued until 1894. An economic slowdown, a fall in silver prices, and the inability to obtain cost effective transportation caused the district to remain idle until the early 1900s, when several companies reopened old properties or made large-scale plans for the development of new discoveries. Perhaps one of the most ambitious undertakings at this time was that of the Western Smelting & Power Company (formerly the Precious Metals Co. founded by G.L. "Doc" Tanzer). A 350kW hydroelectric power plant was constructed on the Clarks Fork river in 1915, and work on a smelter began the following year. From 1923 to 1925, a 9,200 ft. aerial tram linking the Homestake and Gold Dust mines was constructed, but by 1925, the Gold Dust adit had reached 2,100 ft. without tapping an ore body and operations promptly came to a halt. The period of 1910 to 1929 was one of major construction and development, but with little actual production. The stock market crash of 1929 curtailed investment and effectively ended this era of mining in the District.

The most recent period of mining was that of the open pits, with three mines--the McLaren, Glengarry, and Alice E.--operating until the 1950s. In 1933, the McLaren Gold Mines Company began open pit operations on the western side of Fisher Mountain and purchased a smelter which was briefly operated by the Precious Metals Company in the early 1900s. Located one-half mile east of Cooke City on Soda Butte Creek, the smelter was transformed into a mill by its new owners. After burning down in 1937, the mill was immediately rebuilt and processed a total of 300,000 tons of ore until it was again destroyed by fire in 1953. Lacking the capital to rebuild, the McLaren company ceased operations. From 1933 to 1953, the McLaren Gold Mines Company produced 60,000 troy ounces of gold and 2,000 short tons of copper. According to a 1952 report in the *Billings Gazette*, the McLaren production helped make Park County the third highest gold producing area in Montana.

The period following the closure of the McLaren gold mines to the early 1980s saw exploration by a number of major mining companies. Due to the low price of gold, they sought large tonnage, low-grade copper-gold deposits. Various land positions in the New World District were acquired and their potential evaluated by geologic studies and drilling. Acquisitions of both patented and unpatented ground in the McLaren and Miller Creek areas in 1985 led to the formation of Crown Butte Mines, Inc., two years later. While using this land position as a base for exploration, Crown Butte later obtained additional holdings in the Lulu Pass area. Following the discovery of the Miller Creek and Homestake deposits in 1989-90, Crown Butte Mines entered into lease agreements with other patented claim holders and staked a number of unpatented claims to further consolidate its land holdings within the District.

The long and varied history of the New World Mining District has been one of triumph and failure, but more importantly, it is marked by the indomitable spirit and determination of those early pioneers who sought the abundant mineral deposits hidden beneath the mountains. Today, this spirit of determination continues in the hope that someday, the dreams of the past 130 years may come to fruition.

For additional information about the history of the New World Project, call or write:

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Water Quality Is Important To Crown Butte Mines

One of the primary environmental concerns at the New World Project site is the protection of water quality. The proposed mine is located near the headwaters of the Clarks Fork of the Yellowstone River, the Stillwater River, and Soda Butte Creek near Yellowstone National Park and the Absaroka-Beartooth Wilderness. All of the New World Project's facilities will be located in the Fisher Creek drainage, which flows to the southeast and is a tributary of the Clarks Fork River. Maintaining and improving water quality in the proposed mine area is a primary environmental goal for Crown Butte Mines. By applying the modern, Crown Butte is convinced that the needed facilities (power line, roads, mill, tailing impoundment, and worker camp) can be constructed with no negative impact to water quality in Fisher Creek. Crown Butte also believes that using revenues from an active, profitable mine will permit the most effective, thorough, and best long-term improvements to the historic water quality problems in the Fisher Creek/Clarks Fork of the Yellowstone drainage. Compliance with water quality regulations will be a principle concern and requirement of the permits necessary for construction and operation of the proposed mine.

Crown Butte is working hard to meet the water quality challenge at New World and has designed a modern mining operation to achieve the goal of leaving the area in a better condition than that which exists today.

Water Quality Baseline Studies

Baseline studies of surface and groundwater have been conducted since Crown Butte began permitting activities in 1989. Thousands of water samples have been collected and analyzed for pH and chemical constituents, including nutrients and metals. Stream flow, sediment load, temperature, and aquatic organisms have also been monitored and measured. Groundwater samples have been analyzed from springs, seeps, abandoned mine adits, and monitoring wells several times per year. Groundwater flow characteristics have been determined by well tests. Results of all available data have been included in the Permit Application and ongoing monitoring results are periodically supplied to the agencies involved in preparing the Environmental Impact Statement.

Monitoring data show that Fisher and Daisy Creeks, which are located below historic mine sites and are tributaries to the Clarks Fork Yellowstone and Stillwater Rivers respectively, have low pH (acidic) and elevated loads of metals, sulfate, and sediment. Iron oxide precipitates can be seen as red and orange-red staining in the upper reaches of these streams. These historic mines, which were operated and abandoned long before Crown Butte became involved with the New World Project, are the reason that the upper several miles of both Daisy and Fisher Creeks are essentially biologically dead.

Acid rock drainage occurs when sulfide minerals react with oxygen and water, producing acidic, metal laden water. Although much of the water degradation at New World is clearly associated with abandoned mine sites, acid water also occurs near naturally occurring sulfide-rich mineral outcrops which have not been affected by mining. This indicates that there is an underlying natural component (weathering) to the acidification of the streams at New World.

Crown Butte's Plan To Protect Water

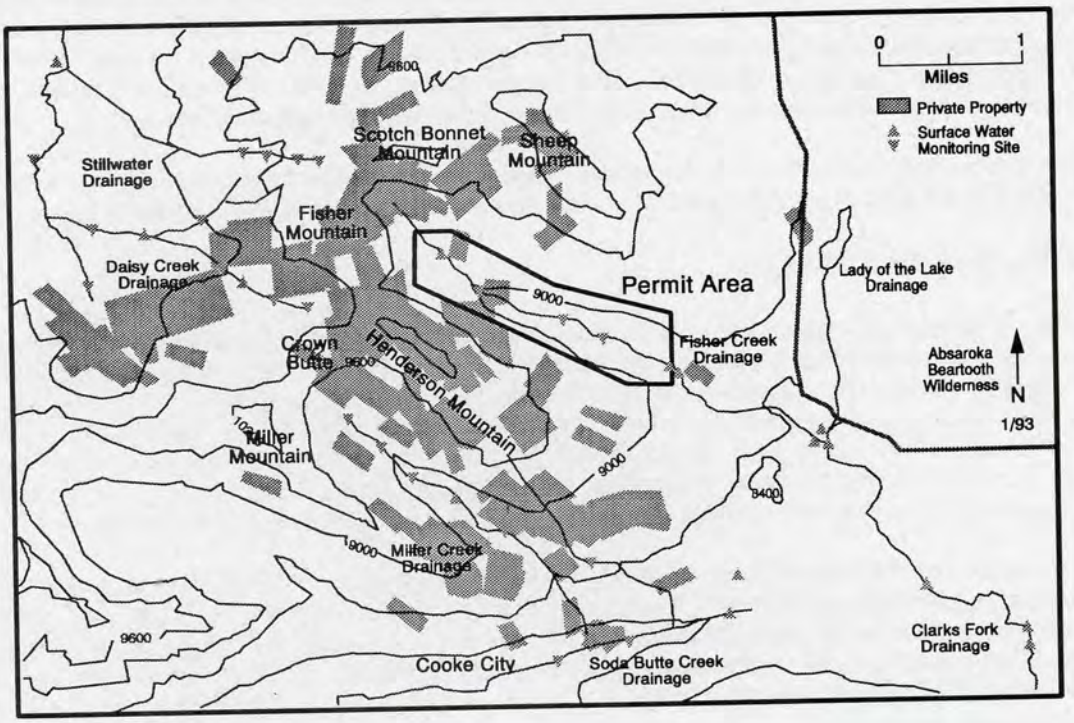
The formation of acid mine drainage is not a foregone conclusio n in a modern mining operation. To prevent adverse water quality impacts at New World, Crown Butte has designed a modern mining operation incorporating state-of-the-art tailing impoundment, underground backfilling using sand-sized, left over crushed-up rock, and water treatment facilities. By incorporating acid discharge from the historic Glengarry Adit into the water treatment system, Crown Butte is confident that Fisher Creek will recover the ability to support a sustainable trout fishery where none now exists. Crown Butte has already begun the effort to improve water quality by proceeding with reclamation, regrading and reseeding of historic mine disturbances in the New World district.

Sulfide-rich material that is produced in the mining and milling process, known as tailing, will be placed back into underground workings as backfill. The remaining tailing that will not fit back underground will be permanently contained in a state-of-the-art lined impoundment designed to eliminate the potential for sulfide oxidation. Revenues

from the proposed mining operation will assure, through the securing and posting of reclamation bonds, that water from the tailing and mine will continue to be treated, as necessary, after the mine operation has ceased. This treatment is designed to maintain water quality necessary to support a recovered fishery in Fisher Creek.

Crown Butte is dedicated to an environmentally compatible mining operation that will improve water quality. By looking to the past and planning for the future, Crown Butte has designed the New World Project to reflect its commitment to water quality.

SURFACE WATER MONITORING SITES



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The area surrounding the New World Project provides nabitat for several species of big game animals such as mountain sheep, mountain goat, moose, elk, mule deer, mountain lion, and black and grizzly bears. Early winters, late spring, high elevations, and deep snow accumulations in the vicinity preclude its use as a winter range for these species with the exception of the big horn sheep. A few mountain sheep are known to winter in windswept alpine areas atop Henderson and Sheep Mountains. With the exception of ventilation raises to be drilled on Henderson Mountain, these areas will not be disturbed by mining activities. The actual local use of the region in the vicinity of the mine permit area by each of these species of big game animals is very low, again because of the long winters and deep snows. The Fisher Creek valley, where all proposed mine facilities are to be located, appears to be used largely as a migration corridor for a very small number of animals that browse or feed during their travel through the corridor. Studies completed by the Gallatin National Forest of actual use of willow browse by moose in the Fisher Creek drainage, indicate that they use less than 1 percent of the available browse annually.

Two federally protected bird species are occasionally observed in the study area. These are the Peregrine falcon and bald eagle. Peregrine falcons and bald eagles can be observed flying over the area, usually along mountain ridges or in the vicinity of mountain passes or lakes. The harsh winters and very late springs of the study area do not provide suitable nesting conditions for either species, and no raptor nests were found during baseline studies of the project area. However, the power line proposed to serve the project is designed to meet or exceed all current standards and applicable laws governing the protection of raptors. The only upland game bird observed during baseline studies was the blue grouse, which is common throughout the area.

Grizzly bears, a threatened species, are present in the area and throughout the Yellowstone ecosystem. The Interagency Grizzly Bear Study Team is currently compiling data from ongoing studies to provide a more detailed analysis of the bear's habitat and actual bear use of habitat in and near the New World Project. The results of this endeavor will be incorporated into the biological assessment for threatened or endangered species required as part of the project environmental analysis. Because of the lack of data in the project vicinity, Crown Butte Mines has funded the studies of the Interagency Grizzly Bear team over the past three years. Preliminary results of these studies indicate that actual bear usage of the Fisher Creek valley is low. The principle use is by a small number of bears using the valley and Lulu Pass as a travel corridor to and from more desirable habitat. Bears travelling through this corridor make use of white bark pine nuts cached by squirrels (and sometimes the squirrels themselves) as a source of food while travelling. Denning within the project and permit area has not been observed, again probably because of the lack of available food in the spring due to very late spring thaws. There is an abundance of suitable habitat in the vicinity of the project area and this does not appear to be a critical issue for the local grizzly bear population. The critical issue for local bear population is mortality, which results in part from human contact and interaction. It is intended that grizzly bear mitigations for project impacts will be directed toward remedying this problem of mortality. Crown Butte Mines will adopt and endorse a strict operating plan to protect the grizzly bear and other species.

Extensive baseline and ongoing aquatic biology studies have been completed covering not only the proposed New World permit area, but surrounding areas as well. The Montana Department of Fish, Wildlife and Parks and Wyoming Game and Fish Department conducted fish population studies in area streams.

Fisher Creek, which has its headwaters at Lulu Pass near the historic Glengarry Adit, is considered biologically "dead" for almost all of its three and one-half mile length. Fish and aquatic insects are not present in Fisher Creek because of the elevated level of metals and low pH factor resulting from natural and historic mine and rock acid drainage. Here, naturally occurring acid rock drainage from the weathering of sulfide-bearing rock has been further aggravated by historic mining activity near the stream's headwaters.

The proposed New World Project will have a positive effect on fisheries within both the Clarks Fork of the Yellowstone and Stillwater river drainages. In fact, reclamation activity that has recently been voluntarily completed upstream, in the vicinity of the Glengarry adit and McLaren and Como pits is hoped to improve water quality, as will revegetating historic mining disturbances. The proposed mine includes treatment of historic mine, and project mine and mill process waters which will improve the quality of Fisher Creek and the fisheries of the Clarks Fork.

For additional information about wildlife on the New World Project, call or write:

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SOCIAL IMPACTS

The proposed New World project mine will have some social impacts in the Cooke City area and elsewhere regionally. The principle source of these impacts will result from in-migrating workers needed to staff the mine. Careful mine planning, company hiring policies, and company policies on where employees may live will help to minimize these impacts.

The mine will employ about 175 people during the 10-15 years of production and normal mining operations. The maximum number of employees during the initial construction phase will reach 350. The construction period will take about two years. The number of construction employees will vary considerably on a seasonal basis with the peak number being reached only during the second spring-summer construction season. It is anticipated that this mining operation will create about 70 secondary jobs in the various regional communities, both to support the mining operation and provide services to its work force.

Crown Butte Mines will have a hiring policy that gives preference to local and regional area residents. Crown Butte Mines can not discriminate through this hiring policy. We can however, require employees who are not residents of the Cooke City-Silvergate local area to reside in company provided housing near the mine site. In order to be considered a local resident of the Cooke City-Silvergate area for employment purposes, the potential employee will have had to reside in the area for at least one year prior to hiring. This in itself will help to minimize the in-migration of new workers to the area.

The company will operate this mine with workers housed in a company provided mine housing. The mine housing will be located in the Fisher Creek drainage immediately adjacent to the project and mine site, about two-and-one-half miles north and east of Cooke City, Montana. With the exception of administrative and management staff (15), and locally hired residents, all employees will be required to live in the camp while working. This will include workers during the construction phase. In addition, as a condition of employment, employees will be prohibited from purchasing property as a primary residence or to reside in the corridor from Sunlight Basin to Silvergate, Montana. It is envisioned that this policy will encourage in-migrating workers and their families to reside in the larger outlying regional communities.

The anticipated work force for the operation and administration of the underground mine, mill, tailing impoundment and worker's camp (175) are listed in the table below. The mine and mill would work two shifts/day. The shift schedule would likely be 7 to 10 days on, and 3 to 5 days off. The extra shift listed in the table below is required because one shift of workers would always be on their days off. The administration staff (15) would primarily be on day shift, but there would be 5 additional administration staff members that would work on other shifts. The administration staff would work five day weeks and would require no back-up. The administration of the mine housing, snow plowing, maintenance and seasonal reclamation work would be contracted.

Employee Location	# per shift	# at camp at any one time	# of shifts	Total
Mill	15	30	2 + 1	45
Mine	30	60	2 + 1	90
Administration	15	20	1 +	20
Contract	20	20	various	20
Total	80	130		175

The State of Montana has a law called the Hard Rock Mining Impact Law, which is designed to minimize the social and economic impacts to local, county and state government agencies responsible for providing infrastructure needs or services to the project area. This law requires a mine developer in Montana to develop a fiscal impact plan and to analyze any fiscal impacts the proposed project may have on local government units. The purpose of this act is to ensure that local government units are able to provide services and facilities necessary for in-migrating

workers and families, and to insure that the increased costs of these services are born by the developer - not the local taxpayers. Typical impacts considered are those of local governmental districts such as: water, sewer, sanitation, school, law enforcement, fire, road improvements or maintenance, emergency medical services, and solid waste disposal. Although Montana laws do not apply to Wyoming, Crown Butte Mines has agreed to engage in an impact analysis in cooperation with Park County, Wyoming, that will identify impacts, potential increased fiscal or infrastructure needs, and propose mitigation measures.

The impacts to the local tourist based economy are expected to be minimal. Most visitors to the area are on their way to or from Yellowstone National Park, some 300,000 of which enter the park annually through the northeast entrance at Silvergate, Montana. This entrance receives fewer Park visitors than any other of the Park entrances. Total Park visitation in recent years has been about 3,000,000 people annually. Most tourists to the area will never know that there is a mine in operation only a few miles north of Cooke City. In order to see the mine, which is not visible from the area highways, it is necessary to drive about four miles up a gravel road along Fisher Creek toward Lulu Pass. In addition, with workers housed and working at the mine site their impacts on the local communities of Cooke City and Silvergate will be kept to a minimum. A good example is that of the Mineral Hill Mine located outside of Gardiner, Montana, at the north entrance of the Park, which goes virtually unnoticed by tourists.

In summary, company mine design, housing requirements, and laws within the State of Montana will all seek to minimize the impacts to the local social structure and community infrastructure and fiscal needs.

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