

Idaho National Laboratory Cultural Resource Monitoring Report for FY 2008

INL Cultural Resource Management Office

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ABSTRACT

This report describes the cultural resource monitoring activities of the Idaho National Laboratory's (INL) Cultural Resource Management (CRM) Office during fiscal year 2008 (FY 2008). Throughout the year, 45 cultural resource localities were revisited including: two locations of heightened Shoshone-Bannock tribal sensitivity, four caves, one butte, twenty-eight prehistoric archaeological sites, three historic homesteads, two historic stage stations, one historic canal construction camp, three historic trails, and Experimental Breeder Reactor-I, which is a designated National Historic Landmark. Several INL project areas were also monitored in FY 2008 to assess project compliance with cultural resource recommendations, confirm the locations of previously recorded cultural resources in relation to project activities, assess the damage caused by fire-fighting efforts, and to watch for cultural materials during ground disturbing activities. Although impacts were documented at a few locations, no significant adverse effects that would threaten the National Register eligibility of any resource were observed. Monitoring also demonstrated that INL projects generally remain in compliance with recommendations to protect cultural resources.

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ACRONYMS

ATV	all terrain vehicle
BEA	Battelle Energy Alliance
BM	Bingham (county)
BT	Butte (county)
BLM	Bureau of Land Management
CITRC	Critical Infrastructure Test Range Complex
CRM	cultural resource management
CWI	CH2M Hill-Washington Group Idaho, LLC
DOE-ID	Department of Energy, Idaho Operations Office
EBR-I	Experimental Breeder Reactor-I
FY	fiscal year
GPS	global positioning system
HeTO	Heritage Tribal Office
ICP	Idaho Cleanup Project
INL	Idaho National Laboratory
JF	Jefferson (county)
LWP	Laboratory Wide Procedure
MCP	Management Control Procedure
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
PBF	Power Burst Facility
SHPO	State Historic Preservation Office
TAN	Test Area North
U.S.	United States
UXO	unexploded ordnance
WERF	Waste Experimental Reduction Facility

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1. INTRODUCTION

The Idaho National Laboratory (INL) is an 890 square mile federal reserve covering portions of five counties on the northeastern edge of the Snake River Plain in southeastern Idaho (Irving 1993, DOE-ID 1996). Lands included within the boundaries of the INL are under the jurisdiction of the U.S. Department of Energy, Idaho Operations Office (DOE-ID) and have been set aside since the 1940s to support many kinds of scientific and engineering research. Currently, four main contractors perform work for DOE-ID at INL. Battelle Energy Alliance (BEA) is the primary Management and Operations contractor, where the INL Cultural Resource Management (CRM) Office is based. CH2MHill/Washington Group (CWI) takes the lead on many cleanup operations related to the Idaho Cleanup Project (ICP), the S. M. Stoller Corp. conducts ecological research, and Bechtel-Babcock & Wilcox-XT, Idaho leads many activities for the Advanced Mixed Waste Treatment project located within the Radioactive Waste Management Complex. INL's Naval Reactor Facility is under the jurisdiction of the U.S. DOE's Naval Reactors Office and is currently managed and operated by Bechtel-Bettis.

Public access to INL has been restricted since its inception in the 1940s and an active security force patrols all lands and facilities. When encountered, trespassers are removed immediately. Largely as a result of long term access restrictions, many cultural resources on the INL are relatively undisturbed. Vandalism is also reduced due to ongoing security patrols. However, over the past decade, unauthorized access has been noted at some INL cultural resource sites, particularly those within hunting and grazing easements, or with easy access from the paved roads that bisect or are adjacent to INL boundaries. This may be related to reductions in INL Security programs (i.e. elimination of daily helicopter patrols).

Access restrictions and security patrols do not prevent all impacts and damage to cultural resources does occur. There are five primary sources of impact:

- Natural processes such as erosion from wind and water or animal burrowing
- Livestock grazing, herding, and associated operations (i.e. watering stations/troughs, feed transport, stock camps)
- Trespassing in highly sensitive areas and unauthorized artifact collection by members of the public and possibly INL employees unaware of penalties associated with these activities
- INL projects that fail to comply with recommendations to protect cultural resources as outlined in Environmental Checklists or other environmental guidance
- Lack of regular maintenance or inappropriate preservation treatments for historic architectural properties

Under DOE-ID's INL Cultural Resource Management Plan (DOE-ID 2007a), BEA's INL CRM Office maintains an ongoing program for monitoring, assessing, and developing strategies to mitigate impacts to cultural resources as a result of these sources of impact. All of the major contractors at INL provide funding, as appropriate, to support this effort. This report provides a summary of the cultural resource monitoring activities completed in fiscal year (FY) 2008.

2. MONITORING PROGRAM DETAILS

A detailed description of the INL CRM Office monitoring program is located in Appendix L of the INL Cultural Resource Management Plan (DOE-ID 2007a). Monitoring enables INL CRM staff to document if the integrity of known resources is being compromised by natural processes, by unauthorized activities, by lack of maintenance or inappropriate preservation measures, or by INL projects. When impacts to cultural resources are identified in this manner, actions to avert further deterioration can be initiated and federal stewardship responsibilities are fulfilled.

2.1 Process of Selection

Specific cultural resources are chosen for monitoring based on feedback from DOE-ID, the Shoshone-Bannock Tribes Heritage Tribal Office (HeTO), and INL stakeholders. The INL CRM archives, which include documentation of over 2,500 archaeological resources and more than 200 historic architectural properties on the INL, are also consulted for appropriate candidates for yearly monitoring. Both DOE-ID and the Shoshone-Bannock Tribes are often directly involved in fieldwork during the monitoring activities and INL project managers and other stakeholders, such as the Idaho State Historic Preservation Office (SHPO), also participate occasionally. Certain resources, like Middle Butte, Prickly, and Aviators Caves, sensitive localities inside the Power Burst Facility (PBF, now Critical Infrastructure Test Range Complex-CITRC), and the Experimental Breeder Reactor-I (EBR-I) National Historic Landmark, are monitored every year. Others, such as historic homesteads and some prehistoric archaeological sites are also visited routinely because of their location in highly visible areas where trespassing has been documented in the past. Each year INL CRM staff also conducts surveillance of resources in a wide variety of settings to address ongoing research interests and the overall focus of INL construction and project activities for the year.

Monitoring of INL projects is completed under direct project funding and may be included as part of an INL Environmental Checklist or other environmental guidance. In FY 2008 monitoring was targeted at several different INL activities and involved different INL contractors. In one FY 2008 example, a Landfill Closure Plan (DOE-ID 2008) mandated the surveillance and in two others, monitoring was stipulated as part of “Findings of No Significant Impact” associated with National Environmental Policy Act (NEPA) Environmental Assessments for the National Security Explosive Test Range (DOE-ID 2007b) and Wildland Fire Management (DOE-ID 2003).

Project-specific monitoring is also routinely completed in the sandy aeolian soils inside the boundaries of the PBF-CITRC area, where Native American human remains have been discovered in both primary and secondary contexts. Cultural resource monitoring of projects that involve soil disturbance within this facility complex is routine and required by company procedures (e.g. BEA’s LWP-8000 and CWI’s MCP-3480). This level of cultural resource oversight ensures that any new discoveries of human remains will be managed appropriately.

Forms developed by INL CRM Office staff are completed for every cultural resource monitoring trip. Hard-copy and electronic versions of these documents are maintained in the INL CRM files and are reproduced for FY 2008 here in Appendix A to this report. INL CRM files also include a variety of photographic documentation of monitoring efforts, reproduced here only in part due to the extremely large size of these high quality electronic images.

2.2 Findings and Documentation

Under the INL CRM monitoring program, there are four possible findings for a given monitoring trip, based on the level of disturbance noted:

- **Type 1:** no visible changes to a cultural resource and/or a project is operating within the limits of cultural resource clearance recommendations
- **Type 2:** impacts are noted but do not threaten the National Register eligibility of a cultural resource and/or a project is operating outside of culturally cleared limitations but no cultural resources have been adversely impacted
- **Type 3:** impacts are noted that threaten the National Register eligibility of a cultural resource and/or a project has been operating outside of culturally cleared limitations and impacts to non-eligible cultural resources have occurred
- **Type 4:** impacts that threaten the National Register eligibility of a cultural resource are occurring during the monitoring visit, justifying the use of the INL Stop Work Authority (LWP-14002, MCP-553)

If Type 2, 3, or 4 impacts are documented during a monitoring trip, notifications are made to project managers, the DOE-ID cultural resources coordinator, and various other parties, as appropriate, according to the severity of the disturbance. Typically, Type 2 impacts can be corrected at once with the cooperation of INL project managers, security personnel, and/or landlord organizations. In these instances, the impacts are only reported in summary fashion in year end reports. Some Type 2 and all Type 3 or 4 impacts prompt formal investigations by the INL CRM Office. INL project managers, security, and/or landlord organizations, DOE-ID, and Shoshone-Bannock tribal representatives may also participate in these investigations.

Results of all monitoring and formal impact investigations are summarized annually in a year-end report to DOE-ID (cf. INL CRM 2007) and also appear in a higher level summary of INL CRM Office yearly activities (cf. Braun et al. 2008) that is sent to DOE-ID and other parties such as the Idaho State Historic Preservation Office, the Shoshone-Bannock Tribes, and stakeholders.

3. RESULTS OF FY 2008 MONITORING

In FY 2008, 55 monitoring forms were completed throughout the year to document individual site visits, to assess project compliance with cultural resource recommendations, to confirm the locations of specific cultural resources in relation to project activities, to assess the damage caused by fire-fighting efforts, and to watch for cultural materials during ground disturbing activities in sensitive areas. All FY 2008 forms are reproduced in Appendix A. Representatives from INL projects, INL Environmental Compliance, DOE-ID, and the Shoshone-Bannock Tribe's HeTO participated in some of the trips in FY 2008. At the request of tribal representatives, multiple trips were made to several INL caves. Several trips were also made to monitor archaeological sites and project activities associated with the National Security Explosive Test Range in order to evaluate progress toward increased awareness of cultural resources and halt impacts to them. These and other monitoring results are detailed in the sections to follow. Although some impacts were documented during the year, none were determined to be adverse.

3.1 Individual Resources

In FY 2008, INL CRM staff conducted official surveillance of 45 individual cultural resources, including two locations of heightened Shoshone-Bannock tribal sensitivity, four caves, one butte, twenty-eight prehistoric archaeological sites, three historic homesteads, two historic stage stations, one historic canal construction camp, three historic trails, and the EBR-I National Landmark. As noted in the discussions to follow, a handful of resources were visited on multiple occasions. Forms that document individual observations and recommendations are included in Appendix A.

3.1.1 Resources of High Tribal Sensitivity

Two INL localities that include sensitive Native American human remains are visited at least once a year for monitoring and stabilization, as necessary. These are the Waste Experimental Reduction Facility (WERF) remains (10-BT-2046), located within the PBF-CITRC area, and Prickly Cave (10-BT-2037). In FY 2008, no new or adverse impacts were observed at the WERF site and measures to stabilize the sensitive remains at this locality appear to remain adequate. However, Type 2 impacts similar to those observed in FY 2007 were again documented at Prickly Cave.

Prickly Cave is a natural lava tube brought to the attention of INL CRM staff by security helicopter pilots in the late 1980s. At various times in the past, the Cave was used as an internment site for at least two Native American individuals. Human bones and perishable artifacts are scattered about the surface inside the lava tube and nonperishable materials occur on the ground surface above. In the early 1990s, additional Native American human bones (10-BT-1991) were salvaged from a disturbed context in the PBF-CITRC area and placed for safekeeping under an introduced rock cap inside the Cave according to Shoshone-Bannock wishes. Since that time, yearly visits have been made to confirm that the Cave and its sensitive contents remain undisturbed.

During a visit to Prickly Cave late in FY 2007, INL CRM staff and Shoshone-Bannock tribal representatives discovered that a loose human bone had been transported out of the protection of the Cave interior and deposited on the ground surface outside (INL CRM 2007). Upon discovery, the sensitive item was returned to its mapped location inside the Cave, but in FY 2008, it had once again been moved to a different location inside the Cave. No other items, including other loose bones and artifacts as well as the bones from 10-BT-1991 located beneath the introduced rock cap, appear to have been moved. All evidence suggests that animals were the culprits in this series of Type 2 impacts. No evidence of

unauthorized human or INL project activity was observed. At the request of tribal representatives in FY 2008, the recently transported bone was placed near the secure remains from 10-BT-1991, padded with sagebrush cuttings, and secured beneath basalt roof-fall fragments obtained from inside the Cave. Monitoring will continue at this sensitive location.

3.1.2 Caves

The basaltic landscape of the INL was formed by lava extruded from low shield volcanoes during the Pleistocene epoch. Over time the flows have accumulated, layer upon layer, with periods of quiescence marked by inter-bedded deposits of aeolian, lacustrine, and alluvial sediments. The basalt flows often contain lava tube systems, with entrances created by partial roof collapse. In some cases, the collapses have formed simple shelter caves with little subsurface extent, but long underground caverns are also present. Entrances range from high vertical drops to easy surface walk-in approaches.

As of FY 2008, 27 caves have been inventoried within the boundaries of the INL. Geologically, biologically, and culturally, each of these resources is unique. Though all were formed from the same basic set of geological forces, each exhibits a different physical setting due to erosion, mineralogy, and other environmental factors. These differing settings support a wide variety of contemporary biological communities; insects, rattlesnakes, bats, packrats and other small mammals, carnivores, and raptors all find suitable homes in INL caves. Some caves even contain ancient paleontological and/or pollen records documenting long term change in biological communities and climatic conditions through time.

For thousands of years, humans have been drawn to INL caves seeking shelter, work areas, and unique opportunities for caching food and valuables. Some caves have also served unique roles in hunting, spirituality, religion, communication, and education. Sensitive archaeological materials (e.g. human remains, perishable artifacts, fragile deposits underfoot) and cultural features (e.g. pictographs, rock features, hearths) remain inside caves today as a fragile record of these many uses. These materials exhibit remarkable potential for providing information of value in understanding the past and as a result, the caves that contain them are eligible for nomination to the National Register of Historic Places. Caves also retain enduring cultural significance to the Shoshone-Bannock Tribes and are a source of fascination to the general public. Scientific interest is also high, with ongoing research on the caves, themselves, as well as their resident and fossil plant and animal populations and sensitive archaeological deposits.

Due to their high sensitivity, a variety of INL caves are monitored every year and some locations are visited several times per year. In FY 2008, Moonshiners Cave (10-BM-48), Rattlesnake Cave, Middle Butte Cave (10-BM-34), and Aviators Cave (10-BT-1582) were monitored. No impacts were observed at Moonshiners or Rattlesnake Caves. However, Type 2 impacts were investigated at Middle Butte and Aviators Caves.

3.1.2.1 Middle Butte Cave

Middle Butte Cave (10-BM-34) is a large lava tube, with a cavernous opening and a subterranean extent of nearly 0.4 miles (Figure 1). Artifacts and paintings on the walls, both ancient and modern, indicate that the Cave has been a destination for human populations for a very long time. The earliest visitors created five panels of pictographs in red pigment on vertical rock surfaces near the mouth of the Cave that depict various human figures, geometric and abstract designs, and buffalo. These hunter-gatherers also left a variety of portable artifacts such as fragmentary projectile points. In historic times, local residents began to visit the Cave as early as the teens or 1920s, “motoring” there from Blackfoot and hosting a contest to name the Cave (Gilbert 2008). These visitors also left their marks on many vertical



Figure 1. Entrance to Middle Butte Cave

walls in the Cave, using a variety of paints, chalks, charcoal, and sharp implements to record names, dates, and numbers apparently dating back to as early as 1925 (Figure 2). Several large fire pits were also created by these visitors and artifacts reflecting short term modern camping were left behind.

Scientific interest in Middle Butte Cave began in 1930, when it was included in an inventory of “Indian Rock Writing” in Idaho (Erwin 1930). In 1967 the Cave was recorded again as part of an early archaeological survey of the National Reactor Testing Station (Butler 1968, 1970) and at this time researchers noted the potential of soil deposits in the Cave to yield important information. No archaeological excavations have ever been conducted at Middle Butte Cave, but in the 1970s, paleontologists collected samples of fossil bones and pollen from subsurface pits inside the Cave. Study of these materials has revealed important information on ancient biological communities and long term climate change in the region (Bright and Davis 1982, Davis and Bright 1983, White et al. 1984, Davis et al. 1986, Mullican and Carraway 1990).

In spite of its location on restricted INL lands, Middle Butte Cave remained a popular destination for weekend recreationists for decades. In the 1990s, the INL CRM Office provided support to formally record and document the fragile pictographs (Boreson 1992), which over the years had been adversely affected by vandalism, granular disintegration, calcite deposits, and algal growth. Steps were also taken to restrict access to the Cave, prohibit camping there, and remove the more recent graffiti since it tends to



Figure 2. Older graffiti in Middle Butte Cave.

generate additional vandalism and is offensive to Native Americans who view Middle Butte Cave as a very special place. The DOE-ID supported these efforts and in 1994, negotiated a Memorandum of Agreement with the Shoshone-Bannock Tribes recognizing significant tribal interests at the Cave for ceremonial, cultural, and educational activities and assuring continued access (DOE-ID 1994).

Public interest in INL caves and in Middle Butte Cave particularly has reached an all time high in the past decade. However, access to the Cave is now limited to official tours. Shoshone-Bannock tribal members of all ages are free to visit the Cave at their convenience under the MOA with DOE-ID and they do so fairly routinely. Since 2004, local school children and their teachers have gained an appreciation for local Native American people and their desert home by visiting Middle Butte Cave during the Rocky Mountain Summer Science Camp sponsored by INL’s ecological contractor, the S. M. Stoller Corp. and the Museum of Idaho, and supported by INL CRM Office staff. INL employees and visitors are also occasionally escorted to the Cave. Visitation, at least in the summer months is at an all time high and tour guides are responsible for following Cave Visitation procedures that protect participants as well as the sensitive biological and cultural resources found at the Cave.

During monitoring in FY 2008, INL CRM staff observed new graffiti in the furthest underground reaches of Middle Butte Cave, approximately 0.38 miles from the surface entrance in a wide round chamber at the end of the lava tube. This chamber has been vandalized many times over the years, but no ancient pictographs have been observed there. The new graffiti included a date of “5/2/08” and several names. In a joint investigation with the Bingham County Sheriff’s Office, INL Security was able to identify and locate the teenaged vandals. In order to avoid charges for trespassing and vandalism to sensitive archaeological materials, the culprits were escorted to the Cave by the county law enforcement

officials and INL security guards to cleanup their graffiti. Fortunately, none of the sensitive archaeological paintings in the cave were impacted by the thoughtless actions of these young people. In the future, tour guides to the Cave will inform visitors of this incident and stress the need to protect the Cave from such impacts. Monitoring will continue to help in the prevention of additional impacts.

3.1.2.2 Aviators Cave

Aviators Cave (10-BT-1582) is another large INL lava tube with extensive evidence of prehistoric use and contemporary significance to the Shoshone-Bannock Tribes. Substantial archaeological deposits in and around the surface of the lava tube preserve a unique, detailed record of seasonal Native American occupation from approximately 1,300 – 150 years ago. The Cave was discovered by security officers on routine helicopter patrol in 1985. In 1989, DOE-ID and the CRM Office supported limited archaeological investigations there, including small scale test excavations (Lohse 1989, INEL CRM 1993). These investigations revealed a well-stratified record of successive seasonal occupation over the past thousand years by hunter-gatherers relying on local plant and animal resources for subsistence, but also participating in long-distance trade.

A remarkable assemblage of perishable artifacts was discovered during the excavation including: bits of twine and string, twists of rabbit fur probably woven into blankets, mats made from sagebrush bark, grass and reeds, strips of hide with fur still attached, leather scraps, hair, basketry fragments, sinew strips, carved wood, arrow shafts and fletching feathers, snare fragments, bone awls and beads, and dentalia shells that can be traced to the northwest coast of North America. Broken and charred bones from many different local animal species and a variety of local seeds and plant remains hint at the kinds of foods that were brought to prehistoric hearths and the times of year in which the Cave was probably occupied. Stone tools were also abundant and included small arrow points of several varieties, arrow-making tools, scrapers, drills, pipe fragments, expedient flake tools, and a wealth of lithic raw materials of many different kinds. Prehistoric pottery and stones used to process plant materials round out the assemblage and complete an unprecedented glimpse into everyday life a thousand years ago.

Shoshone-Bannock tribal representatives place great value on Aviators Cave as an important part of their cultural and spiritual heritage. Every year, they assist INL CRM staff in monitoring, often on multiple occasions, and occasionally, tours of the Cave are arranged for tribal members. Tribal participation in annual monitoring at Aviators Cave has become increasingly important since 2002, because at this time DOE-ID allowed tribal representatives to return some especially sensitive artifacts to an area in the Cave that is known only to them. On yearly visits, they inform INL CRM staff of any changes. Fortunately, there have been no disturbances to these materials noted to date.

Aviators Cave is located in a remote, undeveloped portion of the INL where few roads lead. Indeed, prior to the test excavations in 1989, the site had probably seen very few, if any, historic or modern visitors. While general knowledge of the location of the Cave is widespread within the INL employee community, specific knowledge is limited to INL CRM staff, DOE-ID, ecological researchers from the S. M. Stoller Corp., tribal representatives, and a few visitors escorted to the area on official tours. Even so, over the past decade unauthorized access to the Cave has been on the increase. This recreational visitation has probably been facilitated by a range fire that occurred in FY 2000. Fire breaks created to fight this blaze pass very close to the Cave and shortly after the burn, INL CRM staff and Shoshone-Bannock tribal representatives documented the first known off-road vehicle incursion to the area.

Since vegetation has returned, unauthorized visitors to the Cave appear to be arriving on foot, but with some apparent regularity as new footprints are noted nearly every year. FY 2008 was no exception. During INL CRM and tribal monitoring in August, new footprints were observed inside the Cave and artifacts from the surface were collected and left in a pile near the entrance (Figure 3). It is also



Figure 3. Evidence of unauthorized artifact collection at Aviators Cave (coin included for scale).

possible that artifacts were removed from the site but fortunately, there was no evidence of illegal excavation at the surface or inside the Cave. In the past, INL CRM staff has worked with INL Security and others to warn INL employees that disturbance of archaeological materials is unlawful through annual INL access/security training. Clearly, some employees disregard these rules or perhaps the vandals are not regular INL employees. Because the FY 2008 rearrangement of artifacts at the site represents an escalation in unauthorized activities, INL CRM staff will take extra steps ahead of the summer field season in FY 2009 to contact Security at the nearby Materials and Fuels Complex to enlist their help in protecting the area. Monitoring will also continue on a regular basis.

3.1.3 Buttes

INL contains many low buttes and craters with complex archaeological sites spanning thousands of years of human occupation. Rattlesnakes are also a common component at these localities and must be considered when planning field work. In FY 2008, INL CRM staff visited one of the most prominent buttes in the area, Middle Butte. This local landmark is undeveloped and quite remote. No roads lead to its summit. Previous archaeological surveys have revealed light evidence of prehistoric activities and a larger historic component related to the earliest government-sponsored land surveys of the region in the late 1800s (Figure 4). During a springtime monitoring trip in FY 2008, it was clear that few people venture to the top of the Butte and no impacts were documented at any of the archaeological localities present there.



Figure 4. Historic debris atop Middle Butte with a view of East Butte in the distance.

3.1.4 Prehistoric Archaeological Sites

There are thousands of prehistoric archaeological sites within INL boundaries, ranging in age from more than 10,000 to 150 years old. The great antiquity of many of these sites is notable and provides justification for routine visitation and care to prevent adverse impacts. In FY 2008, INL CRM staff monitored three large and highly visible prehistoric archaeological sites. No new impacts were documented during visits to any of these localities, which included: the Wind-gap Folsom Site (10-BT-1449), Juniper Bends (10-BT-675), and the Pioneer Site (10-BT-676).

A large number of prehistoric archaeological sites were monitored in FY 2008 to assess impacts in relation to specific INL project activities (see Section 3.2 for additional detail on project-specific monitoring). In brief, these monitoring efforts revealed the following:

- At the Test Area North Demolition Landfill, fences erected around the perimeters of two prehistoric campsites (10-BT-1236, BBWI-03-22-01) have protected the sensitive materials from all impacts.
- At three prehistoric campsites located along the Big Lost River (10-BT-2192, 10-BT-2193, 10-BT-2189), no new impacts were observed at a series of backhoe trenches that were backfilled in FY 2007.
- At nine prehistoric lithic scatters located near the National Security Explosive Test Range (10-JF-85, 10-JF-84, 10-JF-83, 10-JF-80, 10-JF-78, 10-JF-77, 10-BM-123, 10-BM-124, BEA-06-20-07), road maintenance activities were found to be extending to the edge of the existing disturbed roadbed and

disturbance was eminent. INL CRM staff worked closely with project and INL Environmental Compliance personnel to address this project creep and protect the sites. In addition, no impacts from ongoing explosive testing were apparent at Hellofasite (10-JF-88), a prehistoric campsite with rock structures.

- Type 2 impacts were documented at two prehistoric lithic scatters (10-BT-1053, 10-BT-1062) as a result of emergency fire-fighting efforts. Artifacts were exposed in fire breaks that pass through these site areas, but the resources remain otherwise undisturbed. Artifact inventories for the sites were expanded significantly due to increased surface visibility in the absence of vegetation. INL CRM staff will work with INL project managers to avoid additional disturbance to these sites during rehabilitation in FY 2009 (Figure 5).



Figure 5. Pink flags marking artifacts in a fire break at prehistoric lithic scatter 10-BT-1053

Several INL projects in 2008 required field visits to confirm the locations of specific prehistoric archaeological sites in relation to proposed activities. Monitoring forms were completed to document the condition of the sites that were revisited, since many had not been evaluated since their original recordings often more than two decades ago. All of the resources visited were undisturbed and once the locations were confirmed, INL CRM staff worked with project personnel to design project activities to avoid any new impacts. The following projects and sites were included in this effort:

- Five lithic scatters (10-BT-571, 10-BT-1086, 10-BT-1087, 10-BT-1075, 10-BT-1068) located around the perimeter of the Infiltration Test Basin south of the Radioactive Waste Management Complex.
- Two campsites (10-BT-1438, 10-BT-1436) located northeast of the Naval Reactors Facility.
- One lithic scatter (10-BT-1209) located in the PBF-CITRC area.

3.1.5 Historic Archaeological Sites

During the period from 1884 to roughly 1930, many hardy and intrepid settlers filed homestead claims on lands that would eventually be designated as the INL. U.S. federal laws that encouraged settlement of western deserts were the primary catalysts for these activities. In the INL region, the Carey Land Act of 1894 and the Desert Reclamation Act of 1902 were especially important and influential. Many types of historic archaeological sites remain as a result of this time, including homesteads, stage and freighting stations, boom towns that arose primarily along the Oregon Shortline Railroad, ditches and canals and the construction camps that were often necessary to support them.

In recent years, the inventory of historic archaeological sites on the INL has been significantly expanded through archival research conducted by INL CRM staff. Hundreds of late 19th – early 20th Century homestead claims have been discovered, important local stage/freighting stations have been confirmed, canals have been examined and several large construction camps have been found in association. Ongoing field investigations have confirmed the locations of many significant archaeological sites. Monitoring of several of these sensitive localities has become routine. In FY 2008, two historic stage stations, three homesteads, and one canal construction camp were visited with the following results:

- No significant new impacts were observed at INL's two known historic stage stations, the Powell Station (10-BT-2194) and the Birch Creek Station (BEA-07-32-115). At the Powell Station, heavy equipment was employed to plant native seed and sagebrush seedlings on the nearby backhoe trenches, which were backfilled in FY 2007, but no impacts occurred to the archaeological materials.
- A total of three historic homesteads were revisited in FY 2008. Two of these sensitive sites, the Richards homestead (BEA-06-31-Richards) and the Kuharski homestead (BEA-07-32-114) are located in high traffic, easily accessible areas and are probably visited often by passersby. No new impacts were observed at either location in FY 2008. A third homestead, the Wilkins site (10-BT-1370) was also revisited in FY 2008 to confirm its location outside the area of potential effect for construction of new sewage lagoons at the Naval Reactors Facility. Monitoring of this location will continue in FY 2009 as these ponds are built.
- Potential impacts from INL project activities were assessed during monitoring of an historic canal construction camp (LMIT-96-51-03) in FY 2008. In this case, off-road ordnance surveys utilizing a 6-wheeled all terrain vehicle (ATV) and equipment cart under strict conditions captured in a related Environmental Checklist, were monitored through the site area. No artifacts were broken or displaced and structural remains were unaffected by the off-road survey.

3.1.6 Historic Trails

INL lands are crossed by a multitude of unimproved trails, many dating to historic times around the turn of the 20th Century. These trails were important links between communities along the Snake River (e.g. Blackfoot and Eagle Rock/Idaho Falls) and those located in mountain valleys to the west and north (e.g. Mackay, Howe, Arco). People, goods, and stock passed freely along the established paths and encouraged economic growth in the region. Continued sporadic travel on the trails today by modern vehicles ensures that they remain visible on the contemporary landscape and is actually a positive impact. However, heavy vehicle and stock traffic and inappropriate maintenance can adversely impact the trails and destroy the context of nearby archaeological resources.

In FY 2008, adverse impacts related to inappropriate FY 2002 maintenance were still visible along one important INL trail, T-1/Goodale's Cutoff. Fortunately, undisturbed segments of this northern spur of the Oregon Trail do remain on INL lands and in places, exhibit original wear from wagon wheels as well as metal scrapings, loose horse shoe nails, and broken wagon parts, over rocky outcrops where the going was rough. Type 2 impacts as a result of overuse during the Spring grazing season were

documented along T-1 in FY 2008 and this is an ongoing problem for several historic trails on the INL. INL CRM staff continues to work with DOE-ID to engage the Bureau of Land Management (BLM) and their grazing permittees in minimizing these impacts. Remediation goals might include additional survey of the trails and documentation of the archaeological sites along them as well as working toward designating specific areas to locate temporary stock camps and watering stations.

A second historic trail, T-2/Powell's Stage Road, was also investigated in FY 2008. This trail crosses the Big Lost River on INL lands at the historic Powell's Stage Station. In FY 2008, this trail appeared to be in good shape with minimal impacts due to traffic or grazing. State-of-the-art geophysical mapping tools employed in the investigation of the Stage Station may prove useful in future projects to delineate and characterize historic trails. At the T-2 river crossing, several side routes have been identified in the geophysical imagery collected of the Station and its surroundings (Gilbert et al. 2008).

On occasion, INL project activities also have the potential to impact historic trails. Early in FY 2008, monitoring of a segment of T-20/Blackfoot-Little Lost River Road revealed Type 2 impacts that were easily corrected by redirection of project activities. In this situation, the integrity of T-20 was being jeopardized by use as a parking and turnaround area near a temporary flag pole. High traffic had begun to create a wide zone of disturbance that was erasing the original trail. INL CRM staff worked with project personnel to move the flag pole and eliminate the impacts. Monitoring will continue in this high traffic area.

3.1.7 Experimental Breeder Reactor-I

Experimental Breeder Reactor-I (EBR-I) is INL's single designated National Historic Landmark, recognized as such because of its association with the early development of nuclear power and reactor technology. It is the only INL facility open to the public on a seasonal basis (Memorial Day through Labor Day, annually). In past years, the site has benefited from a "Save America's Treasures" grant, which supported updated exhibits to enhance the Visitors Center and addressed some preservation issues (brick and mortar restoration) (Braun 2006). In FY 2008, no new impacts were observed from project or visitation activities at EBR-I. INL CRM staff continues to work with DOE-ID and INL landlord organizations to address ongoing maintenance and preservation, including technical problems related to the educational displays, drainage issues, and a pending roof replacement.

3.2 Projects

Project-specific cultural resource monitoring in FY 2008 took several different forms. In one type, archaeological sites previously recorded in the vicinity of new INL projects were revisited to confirm that no impacts would occur as a result of the activities proposed. These reviews are presented in Section 3.1 according to the types of archaeological resources investigated. In a second type of project monitoring in FY 2008, INL projects were randomly selected and audited for compliance with cultural resource recommendations made during the INL environmental review process. Finally, in a third type of project monitoring, INL CRM staff directly observed ground disturbance associated with INL project activities in archaeologically sensitive areas. In total, seven projects were monitored. Results appear in the Sections to follow.

3.2.1 National Security Explosive Test Range

INL CRM staff cooperated with DOE-ID and INL Environmental Compliance personnel early in FY 2008 to correct several issues regarding archaeological resource protection at BEA's National Security Explosive Test Range. At issue were vehicle turnarounds and expanded maintenance of road T-25 (Figure 7), extension of project activities into unsurveyed areas, failure of project personnel to attend



Figure 6. Road maintenance impacts along T-25 leading to the National Security Explosive Test Range.

cultural resource awareness training, and ground motion monitoring results for Hellofasite (10-JF-88). During the course of the year, project personnel corrected these problems and continue to work cooperatively with INL CRM staff to prevent impacts to sensitive cultural resources. Two separate cultural resource monitoring trips confirm their progress toward meeting the requirements of the NEPA Environmental Assessment prepared for the project (DOE-ID 2007b, Pace et al. 2006).

3.2.2 Long Term Ecological Sampling

Ecological sampling teams employed by CWI, the INL site cleanup contractor, travel to many undeveloped areas during the course of their summer field activities. In the process, they drive through, walk through, and even collect biological samples within the boundaries of sensitive archaeological sites. In FY 2008, INL CRM staff monitored their activities to ensure that simple rules for protecting archaeological sites were being followed. Project personnel had been trained in cultural resource awareness/protection, vehicles were limited to existing roads, and all activities were being conducted in areas that had been surveyed for cultural resources. No adverse impacts had occurred, nor are any anticipated by this ongoing project.

3.2.3 Powerline Testing

Project developments associated with a FY 2008 BEA powerline testing project on the 135kV line stretching from PBF-CITRC east to the Materials and Fuels Complex included three large gravel pads for equipment installation, several new power poles, installation of a new cable on existing power poles, and road maintenance. During monitoring visits in FY 2008, it was clear that ground disturbance associated with this work was restricted to the surveyed areas and none of the sensitive archaeological sites located in the vicinity were being impacted. In addition, no cultural materials were observed during direct observation of ground disturbing activities necessary to prepare the new equipment pads.

3.2.4 Big Lost River Trenches Revegetation

In 2002, DOE-ID, the U. S. Bureau of Reclamation, and various University partners initiated a paleohydrology study to develop a defensible and consistent interpretation of flood history and flood hazards on the INL. Several backhoe trenches excavated into Big Lost River floodplain deposits near the modern riverbed were necessary to support this investigation. INL CRM staff assisted this project in the assessment and mitigation of impacts to cultural resources (Pace 2002a, 2002b). A NEPA Environmental Assessment and Memorandum of Agreement between DOE-ID, the Idaho SHPO, and Advisory Council on Historic Preservation guided project activities at one trenching location (DOE-ID 2002).

In FY 2007, the trenches were backfilled under the direction of the S. M. Stoller Corporation, DOE-ID's ecological support contractor. INL CRM staff and Shoshone-Bannock tribal representative were on hand to monitor all ground disturbances and no sensitive cultural materials were observed. In FY 2008, S. M. Stoller personnel returned to the trenches to plant native seed and sagebrush seedlings over the disturbed areas (Figure 6). Heavy equipment operations were again monitored for cultural resource impacts during this work and no sensitive materials were uncovered. Sensitive historic features at the Powell Stage Station were also protected from any new impacts.

3.2.5 Geophysical Surveys for Subsurface Unexploded Ordnance

From 1942 to 1949 and again in 1968, lands and facilities that are now part of the INL filled an important role in national defense as part of the Arco Naval Proving Ground. During these times, the U.S. Navy and Army built facilities to test-fire large naval guns used during World War II and the Vietnam War, practiced aerial bombing techniques, conducted tests to determine the most effective ways of transporting and storing ammunition and ordnance, and disposed of old ordnance devices and components that were no longer useful.

Cleanup of the unexploded ordnance (UXO), ordnance components, and explosive compounds that remain from these activities has been ongoing at INL since 1994. Archaeological surveys have been completed to identify archaeological resources within defined ordnance areas and assess the potential effects of cleanup activities on them (cf. Pace 1997). In FY 2007, geophysical surveys were initiated to evaluate UXO that still remains beneath the surface at identified ordnance areas, utilizing cart-mounted magnetometers and a 6-wheeled ATV to collect data.

In the gravelly floodplain soils that have been mapped with the ATV-cart setup to date, impacts have been minimal. In sandier deposits, slight lateral displacement of soils has been observed in the tracks of the ATV, but even these effects in these particular soils have proven to be negligible and not much greater than heavy foot traffic. In FY 2008, mapping efforts were focused at two areas, one near the INL Experimental Field Station, also known as the Dairy Farm, and a second known as the Fuze Burn area. Operations were again monitored by INL CRM staff to determine if known archaeological resources were



Figure 7. No-till Rangeland drill used to plant native seed at the Big Lost River Trenches.

being impacted by the work. As was documented in FY 2007, no adverse impacts occurred when transects were made in FY 2008 over the surface at a historic canal construction camp (LMIT-96-51-03). Ground surfaces at the Experimental Field Station also displayed no adverse impacts, although there were no known archaeological sites in this ordnance area. Data collected during the geophysical surveys may also be useful in future archaeological investigations. The ATV and cart will be considered and evaluated for use in other ordnance cleanup areas on a case-by-case basis.

3.2.6 Test Area North Demolition Landfill

In 2003, a new landfill was developed at INL's Test Area North (TAN) to support ongoing demolition activities at facilities in the northern portion of the Laboratory. Archaeological investigations completed in advance of the project revealed two sensitive archaeological sites within the area of potential effect for construction and operation of the new landfill (Pace 2003). In order to protect these sensitive resources from harm during initial development and ongoing day-to-day operations, fences were built around their perimeters. Monitoring in FY 2008 demonstrated that the sites have been protected from impact. Artifacts appeared to be untouched and changes to the surrounding landscape appeared relatively subtle. The surrounding area should return to an approximate pre-Landfill appearance after re-establishment of native vegetation within the next few years. At this time, when all threats of impact are gone, the fences can be removed.

3.2.7 Power Burst Facility-Critical Infrastructure Test Range Complex

Company environmental procedures require project managers to contact the INL CRM Office in advance of ground disturbance within the fenced boundary of PBF-CITRC. This is due to the occurrence of human remains in original as well as secondary contexts at two separate locations within the facility. Accelerated cleanup across the INL and new activities to support National Security have resulted in an increase in the number of projects at this facility. In FY 2008, these activities included removal of a subsurface tank, leveling of a soil berm, waterline capping and removal, road grading, and excavation for new equipment pads near the electrical substation. On five occasions in FY 2008, ground disturbance of this nature was monitored for human remains. No sensitive materials were observed at any time.

4. RECOMMENDATIONS

Monitoring is an effective method of documenting impacts to INL cultural resources and is a necessary first step in prevention. Several broad recommendations result from FY 2008 surveillance. First, at a minimum, the condition of the following resources of high sensitivity should be assessed in FY 2009:

- WERF Remains (10-BT-2046)
- Prickly Cave (10-BT-2037)
- Middle Butte Cave (10-BM-34)
- Aviators Cave (10-BT-1582)
- Pioneer Site (10-BT-676)
- Powell Stage Station (10-BT-2194)
- Goodale's Cutoff
- Experimental Breeder Reactor I National Historic Landmark

In FY 2009, INL CRM staff should also continue to work with DOE-ID, HeTO tribal representatives, and project personnel, as appropriate, to implement protections to prevent future impacts at several sensitive Caves, including: Prickly (10-BT-2037), Middle Butte (10-BM-34) and Aviators (10-BT-1582). Ongoing impacts from heavy traffic and grazing-related activities along INL's historic trails should also be tracked and mitigation initiated, as necessary, with the cooperation of DOE-ID, the BLM, and individual grazing permit holders. Finally, soil disturbance at the PBF-CITRC area should continue to be regularly monitored for additional occurrences of sensitive Native American human remains, even in disturbed contexts and especially those associated with original facility construction in the 1950s and 1960s.

In the project realm, ongoing INL CRM staff participation in ordnance surveys and controlled offroad use of the ATV and geophysics cart should continue in FY 2009. The method should also be evaluated for deployment at other ordnance areas as appropriate based on a case-by-case review. Additional monitoring of the rock features and extensive surface artifacts at Hellofasite (10-JF-88) and the many archaeological sites located along the T-25 powerline road near the National Security Explosive Test Range are also imperative as activity levels at the Range are anticipated to remain high.

Cultural resource monitoring in FY 2009 should also be focused on several broad classes of other INL cultural resources and projects, as funding allows. Minimally, this might include:

- Archaeological sites located in high traffic areas such as the INL boundary and Grazing Boundary or where unauthorized visitation is likely
- Historic homesteads, including those identified during ongoing archival research
- Historic trails
- Buttes, craters, and caves
- World War II buildings and features at Central Facilities Area and within the broader Naval Proving Ground
- Areas burned by wildfire and scheduled for rehabilitation
- INL powerline research projects
- INL gun and test range safety fans

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Appendix A
Monitoring Forms

Appendix A

Monitoring Forms

Appendix A contains electronic versions of FY 2008 monitoring forms originally completed in the field. In a few cases, multiple field visits to the same site location are documented on a single form. FY 2008 forms are organized according to the following categories presented in the preceding report:

- Resources of High Tribal Sensitivity
- Caves
- Buttes
- Prehistoric Archaeological Sites
- Historic Archaeological Sites
- Historic Trails
- Experimental Breeder Reactor-I
- Projects

A: Resources of High Tribal Sensitivity

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-06
Monitor Name(s): C. Marler
Monitor Date: 6/18/08

Site Name/Number: WERF burial
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Minor rodent burrowing- doesn't appear recent
Significance of Impact: none

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: _____

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-01
Monitor Name(s): Clayton Marler, Carolyn Smith, Diana Lowrey
Monitor Date: 11/01/07

Site Name/Number: Prickly Cave
Reason for monitoring: Follow-on to monitoring conducted on 9/25/07 when a human mandible previously located inside the cave was found outside.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Bioturbation (probably packrat and coyote)
Significance of Impact: Not significant

Did disturbance or impact extend into undisturbed areas? NA Yes No
If yes, describe: _____

Work Halted? NA Yes No
If yes, describe: _____

Notifications: _____
Primary contact(s): _____

Date contacted: _____
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? Yes No
If yes, describe: Thin scatter of about 65 flakes, 2 bifaces and a broken piece of ground stone carved surrounding the cave entrance. Cultural materials from the cave interior include shaped wood and horn implements.

Cultural Materials collected? Yes No
If yes, describe: _____

General Comments: The human mandible (returned to the cave interior during the 9/25/07 visit) had again been moved. Although it was still inside the cave, it was situated in a bed of fairly fresh prickly pear cactus likely brought into the cave by packrats, approximately 3 m distant from where it had been placed on 9/25. At the request of the Tribal representative it was moved adjacent to the PBF remains, padded with sage branches and lightly covered with basalt cobbles. The PBF remains show no sign of disturbance since their placement in Prickly Cave in 1995. They are located next to the basalt cave wall and are protected by cloth wrapping and a solid layer of river cobbles imported to the site to distinguish them from the Prickly Cave human remains. Although a detailed inventory of cultural items from the cave interior was not performed, a cursory examination revealed several previously recorded items such as the "bullroarer", horn spoons, possible sagebrush torches and a possible arrow shaft. Disarticulated and scattered human and animal bones were also noted. Close examination of cultural materials located outside surrounding the cave entrance revealed strong conformance to details provided in the site form created in 1995. Again, no evidence of any unauthorized human activity was found and it is concluded that noted disturbances are the result of animal activity.

Recommendations: Continue monitoring twice per year

Attach additional documentation, as warranted (photos, profiles, etc.) Yes No
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-08
Monitor Name(s): Clayton Marler, LaRae Buckskin, Carolyn Smith
Monitor Date: 7/10/08

Project: _____
Site Name/Number: Prickly
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No new impacts
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Thin scatter of prehistoric debitage outside of the cave- human remains inside the cave appeared undisturbed

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring twice per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

A: Caves

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-05
Monitor Name(s): C. Marler, D. Lowrey
Monitor Date: 6/17/08

Site Name/Number: Moonshiner's Cave
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): _____
Significance of Impact: No new impacts noted

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: A few flakes around the cave entrance

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-09
Monitor Name(s): C. Marler, C. Smith, L. Buckskin
Monitor Date: 8/4/08

Site Name/Number: Rattlesnake Cave
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No new impacts
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Thin lithic scatter on cave/crater exterior

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-02
Monitor Name(s): C. Marler, Alana Jensen
Monitor Date: 5/7/08

Site Name/Number: Middle Butte Cave/10BM34
Reason for monitoring: _____

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): New graffiti
Significance of Impact: New impact will not affect National Register eligibility- the new graffiti was found at the back of the cave where substantial other graffiti already exists

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications:
Primary contact(s): Robert Gallegos, Chris Heyer
Date contacted: 5/12/08
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Small scatter of prehistoric and historic trash around the cave exterior; pictographs inside the cave.

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: The new graffiti included a date (5/2/08) and names. BEA security was notified and they in turn notified the Bingham County Sheriff's Office who in turn found the vandals. They were required to return to the cave under escort to remove the graffiti. Subsequent cave visits revealed that this had been accomplished.

Recommendations: _____

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-11
Monitor Name(s): C. Marler, C. Smith, L. Buckskin
Monitor Date: 8/4/08

Site Name/Number: Middle Butte Cave/10BM34
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No new impacts
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Thin scatter of prehistoric and historic debris. Rock art inside the cave.

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring twice per year.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-10
Monitor Name(s): C. Marler, Carolyn Smith, LaRae Buckskin
Monitor Date: 8/4/08

Site Name/Number: Aviator's Cave
Reason for monitoring: Routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Unauthorized visit, artifact disturbance ("potter's pile")- footprints noted inside the cave

Significance of Impact: Disturbance will not affect the Cave's National Register eligibility- some surface debitage was moved but it is impossible to tell if anything was removed from the site. Most diagnostic tools were collected from site during ISU's work there in the 1990's and during this visit a few bifaces and point fragments were still easily found. No evidence of illegal excavation.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications:
Primary contact(s): Robert Gallegos
Date contacted: 8/6/08
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: _____

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: This was the first visit to the cave since the previous October; there were no clues as to when, during the intervening 10 months, the unauthorized visit might have taken place. Security notification upon receipt of photos from Carolyn Smith.

Recommendations: Continue monitoring twice per year.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

A: Buttes

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-21
Monitor Name(s): Brenda R. Pace, Hollie Gilbert, John Irving
Monitor Date: May 14, 2008

Site Name/Number: Middle Butte
Reason for monitoring: Periodic surveillance of archaeological sites atop Middle Butte

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts apparent.
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: N/A

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Artifacts are sparse on top of the Butte and include a few flakes of obsidian as well as historic debris associated with early land surveys. In 2008, a few flakes and a nondiagnostic biface fragment were observed along with survey markers, a brass cap, and historic domestic debris.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Area appears undisturbed, perhaps because of the rattle snakes that make their homes in the surrounding rock. Area remains inaccessible to vehicles.

Recommendations: Continue periodic monitoring.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken

A: Prehistoric Archaeological Sites

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-03
Monitor Name(s): C. Marler
Monitor Date: 5/7/08

Site Name/Number: 10BT1449
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No new impacts noted
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: _____

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: This site has been significantly impacted in the past by vehicular traffic, and construction debris dumping from the nearby RWMC. However the site retains significance due to the evidence of Folsom habitation.

Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-04
Monitor Name(s): C. Marler
Monitor Date: 5/7/08

Site Name/Number: Juniper Bends
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): _____
Significance of Impact: Although the site has been impacted in the past by vehicular traffic and probable looting, no new impacts were noted

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Dense lithic scatter

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: CFM-08-07
Monitor Name(s): C. Marler, C. Smith, L. Buckskin
Monitor Date: 7/10/08

Site Name/Number: Pioneer
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): erosion
Significance of Impact: Minor weathering along exposed riverbank continues- will not affect the site's National Register eligibility

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: _____

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Extensive/intensive lithic scatter, buried cultural deposits, historic townsite

Cultural Materials collected? **Yes** **No**
If yes, describe: _____

General Comments: _____
Recommendations: Continue monitoring once per year

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-12
Monitor Name(s): Brenda R. Pace
Monitor Date(s): May 5, 2008

Site Name/Number: 10-BT-1236
Reason for monitoring: Routine surveillance of archaeological sites located within the boundaries of the Test Area North Demolition Landfill

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Surrounding area has been disturbed by heavy equipment depositing construction waste from demolition and covering with dirt fill taken from the nearby embankment. Archaeological materials remain undamaged from these activities. Natural erosion does continue to impact the site.

Significance of Impact: No direct impacts to archaeological site as a result of Landfill operations. Setting has been changed, but after revegetation it should return to approximate pre-Landfill appearance.

Did disturbance or impact extend into undisturbed areas? Yes No
If yes, describe: N/A

Work Halted? Yes No
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#:

Cultural Materials observed? Yes No
If yes, describe: In 1985, this locality was originally recorded as an isolated Elko corner-notched dart point. In 2003, the artifact assemblage was significantly expanded to include a small scatter of debitage, a steep end scraper, and 40 sherds of Intermountain Ware pottery from a classic flat-bottomed pot. No new artifacts were observed in 2008.

Cultural Materials collected? Yes No
If yes, describe: N/A

General Comments: Fences placed around the perimeter of the site have prevented damage. Artifacts appear to be untouched, indicating that unauthorized collection has not been a problem. Site appears undisturbed except for changes to the surrounding landscape and the setting of the site. These impacts will be minimized by rehabilitation planned when the landfill is closed.

Recommendations: Continue monitoring for continued compliance with recommendations for site protection. Arrange to have fences removed when landfill is closed.

Attach additional documentation, as warranted (photos, profiles, etc.) Yes No
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-13
Monitor Name(s): Brenda R. Pace
Monitor Date(s): May 5, 2008

Site Name/Number: BBWI-03-22-01
Reason for monitoring: Routine surveillance of archaeological sites located within the boundaries of the Test Area North Demolition Landfill

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Surrounding area has been disturbed by heavy equipment depositing construction waste from demolition and covering with dirt fill taken from the nearby embankment. Archaeological materials remain undamaged from these activities. Natural erosion does continue to impact the site.

Significance of Impact: No direct impacts to archaeological site as a result of Landfill operations. Setting has been changed, but after revegetation it should return to approximate pre-Landfill appearance.

Did disturbance or impact extend into undisturbed areas? Yes No
If yes, describe: N/A

Work Halted? Yes No
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#:

Cultural Materials observed? Yes No
If yes, describe: In 2003, approximately 100 flakes were observed on top of and eroding down the face of the embankment that marks the edge of old Lake Terreton (4,800 ft elevation). Chipped stone tools associated with the flakes included broken and unbroken dart points, scrapers, expedient flake tools, a fragmentary grinding stone, and fire-cracked rock indicating the presence of a fire hearth. No new artifacts were observed in 2008.

Cultural Materials collected? Yes No
If yes, describe: N/A

General Comments: Fences placed around the perimeter of the site have prevented damage. Artifacts appear to be untouched, indicating that unauthorized collection has not been a problem. Site appears undisturbed except for changes to the surrounding landscape and the setting of the site. These impacts will be minimized by rehabilitation planned when the landfill is closed.

Recommendations: Continue monitoring for continued compliance with recommendations for site protection. Arrange to have fences removed when landfill is closed.

Attach additional documentation, as warranted (photos, profiles, etc.) Yes No
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-15
Monitor Name(s): Brenda R. Pace
Monitor Date: May 7, 2008

Site Name/Number: 10-BT-2189/BLR-8 Trenches
Reason for monitoring: Routine surveillance of archaeological sites impacted by the Big Lost River Trenches project

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Heavy equipment originally. Recontoured areas with new plants sprouting appear to be attractive to local antelope and deer. Grazing by these native ungulates has increased and so have the associated impacts (trampling, sleeping areas, paths).

Significance of Impact: None of the impacts from native ungulates are significant.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Backfilling and revegetation carefully designed to prevent disturbance outside the original area of potential effect.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: Shoshone-Bannock Tribes
Primary contact(s): Caroline Smith
Date contacted: Multiple communications
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Trenches were originally placed inside the boundaries of this prehistoric campsite. Artifacts and cultural features occur throughout the area and were observed during the backfilling and revegetation operations in undisturbed areas around the trenches.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Backfilling activities began on August 28 and finished on September 6, 2007, and revegetation followed on October 8-9, 2007. Project personnel were cooperative and concerned about cultural resource protection, minimizing impacts as much as possible at all times.

Recommendations: Continue yearly monitoring.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-17
Monitor Name(s): Brenda R. Pace
Monitor Date: May 7, 2008

Site Name/Number: 10-BT-2192/Short Saddle Trench
Reason for monitoring: Routine surveillance of archaeological sites impacted by the Big Lost River Trenches project

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Heavy equipment originally. Recontoured areas with new plants sprouting appear to be attractive to local antelope and deer. Grazing by these native ungulates has increased and so have the associated impacts (trampling, sleeping areas, paths).

Significance of Impact: None of the impacts from native ungulates are significant.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Backfilling and revegetation carefully designed to prevent disturbance outside the original area of potential effect.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: Shoshone-Bannock Tribes
Primary contact(s): Caroline Smith
Date contacted: Multiple communications
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Trenches were originally placed inside the boundaries of this prehistoric lithic scatter. Artifacts occur throughout the area and were observed during the backfilling and revegetation operations in undisturbed areas around the trenches.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Backfilling activities began on August 28 and finished on September 6, 2007, and revegetation followed on October 8-9, 2007. Project personnel were cooperative and concerned about cultural resource protection, minimizing impacts as much as possible at all times.

Recommendations: Continue yearly monitoring.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-18
Monitor Name(s): Brenda R. Pace
Monitor Date: May 7, 2008

Site Name/Number: 10-BT-2193/Short Saddle Trench
Reason for monitoring: Routine surveillance of archaeological sites impacted by the Big Lost River Trenches project

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Heavy equipment originally. Recontoured areas with new plants sprouting appear to be attractive to local antelope and deer. Grazing by these native ungulates has increased and so have the associated impacts (trampling, sleeping areas, paths).

Significance of Impact: None of the impacts from native ungulates are significant.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Backfilling and revegetation carefully designed to prevent disturbance outside the original area of potential effect.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: Shoshone-Bannock Tribes
Primary contact(s): Caroline Smith
Date contacted: Multiple communications
Contact Method: | **E-mail** | **Phone** | **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Trenches were originally placed inside the boundaries of this prehistoric lithic scatter. Artifacts occur throughout the area and were observed during the backfilling and revegetation operations in undisturbed areas around the trenches.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Backfilling activities began on August 28 and finished on September 6, 2007, and revegetation followed on October 8-9, 2007. Project personnel were cooperative and concerned about cultural resource protection, minimizing impacts as much as possible at all times.

Recommendations: Continue yearly monitoring.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-02
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-85
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#:

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984 the site was described as a small scatter of six flakes with no diagnostic artifacts and in 2006, a widely dispersed assemblage of primarily cryptocrystalline debitage including approximately 20 flakes was observed and two expedient flake tools were identified. No new artifacts observed in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Poles 177 and 178 are located in the site area

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-03
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-84
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984 the site was described as a lithic scatter and in 2006 a few flakes and one biface fragment were noted. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 171 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-04
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-83
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#:

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984 the site was described as a light flake scatter and in 2006 a few flakes and one biface fragment were noted. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 170 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-05
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-80
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#:

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984 the site was described as a lithic scatter and in 2006 a widely dispersed assemblage of debitage including approximately 100 flakes and two projectile point fragments were noted. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 167 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-06
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-78
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984, the site was described as a thin scatter of flakes with one possible ground stone fragment. In 2006, a similar assemblage of debitage was noted including approximately 50 total flakes. In addition, the following tools were inventoried: one fragmentary large Corner-notched point, a pressure-flaked biface fragment, a small steep end scraper, a spokeshave, and a retouched flake. The ground stone artifact was not re-identified. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 164 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-07
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-JF-77
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984, the site was described as a small, thin lithic scatter. In 2006, approximately 50 obsidian flakes and four stone tools were documented. The tool inventory included one fragmentary Elko Corner-notched point, two pressure-flaked biface fragments and possible projectile points, and one utilized flake. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-08
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-BM-123
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984, the site was described as a very thin lithic scatter with two retouched flakes, one utilized flake, and two biface fragments. In 2006, only one unmodified flake was observed in the site area. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 143 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-09
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: 10-BM-124
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984, the site was described as a small lithic scatter with approximately 50 artifacts, including four biface fragments and three expedient flake tools. In 2006, only one unmodified flake was observed in the site area. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 143 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-10
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: BEA-06-20-07
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles and under the lines. Road construction has heavily impacted a linear path through site area. Road is heavily used now. No new impacts associated with the Large Scale Explosive Test Range, aside from road work, were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline and road maintenance have caused significant impact in portions of the site.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: No new disturbance noted outside the previously impacted zones around power poles, under the lines, and in the road corridor. Heavy use and dump/fill of gravel to maintain the road may have widened the road corridor.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: In 2006 the site was described as a dispersed scatter of approximately 40 flakes and a single nondiagnostic biface fragment. No new artifacts noted in 2008.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued maintenance and heavy use of the road may cause additional impacts, creating a wider corridor of disturbance. Pole 152 is located in the site area.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as road and powerline maintenance/repair. Consider marking sensitive stretches and/or additional data collection along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-20
Monitor Name(s): Brenda R. Pace
Monitor Date: May 20, 2008

Site Name/Number: 10-JF-88/Hellofasite
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Power pole inspection, maintenance, and repair have caused ground disturbance around power poles within the boundaries of the site. No new impacts associated with the Large Scale Explosive Test Range were noted.

Significance of Impact: No new impacts noted. Past impacts during powerline maintenance have caused significant impact.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: Disturbed areas have been impacted by previous powerline maintenance/repair activities. No new disturbance noted outside these previously impacted zones.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding

Primary contact(s): N/A

Date contacted: N/A

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: In 1984 the site was named "Hellofasite" for the dense, diverse scatter of artifacts and unique rock walls recorded there. In 2006, 2007 and 2008, the original observations were confirmed and flakes were observed around a gravel pad and in sandy soils surrounding a power pole in the western end of the site. The remainder and the majority of the site to the east remains apparently undisturbed.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Visual inspection of site and rock walls indicates no impact resulting from explosive testing and ground motion data collected by the project confirms this. Surface artifacts appear undisturbed and the site is not getting heavy visitation. Powerline repair has cause extensive soil disturbance but appears to be restricted to areas previously impacted adjacent to the poles.

Recommendations: Continue monitoring for impacts associated with the nearby Test Range as well as powerline maintenance/repair.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-23
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): July 11, 2008

Site Name/Number: 10-BT-1053
Reason for monitoring: Damage assessment following July 9 range fire

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Fire-fighting efforts including offroad vehicle use, staging, excavation of fire breaks, and post-fire mapping and evaluation.

Significance of Impact: Single width fire break passes through artifact scatter. Small pressure flakes are turned up in the soil ricks. Impacts are adverse in the fire break, but a large portion of the site remains undisturbed. Future impacts may result from rehabilitation of the fire breaks and natural soil erosion.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Prior to the fire, this area was undeveloped and impacted only by the powerline and associated access road.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: | **E-mail** | **Phone** | **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a small scatter of approximately 20 flakes and one utilized flake. In 2008 the surface inventory appeared unchanged, although the artifact inventory was expanded to include approximately 35 flakes and a biface fragment. This was probably due to removal of the local vegetation from the fire.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, with a few more artifacts showing up after the burn. Fire breaks cut through the site area and artifacts are exposed in them, including a biface fragment. Disturbance is limited to the narrow fire breaks and much of the site remains undisturbed.

Recommendations: Avoid additional impacts by leaving soil ricks in place or have them leveled by hand. Conduct cultural monitoring of any additional rehabilitation activities.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-24
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): July 11, 2008

Site Name/Number: 10-BT-1062
Reason for monitoring: Damage assessment following July 9 range fire

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Fire-fighting efforts including offroad vehicle use, staging, excavation of fire breaks, and post-fire mapping and evaluation.

Significance of Impact: Single width fire break passes along edge of artifact scatter. A few small pressure flakes are turned up in the soil ricks. Impacts are adverse in the fire break, but a large portion of the site remains undisturbed. Future impacts may result from rehabilitation of the fire breaks and natural soil erosion.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Prior to the fire, this area was undeveloped and impacted only by the powerline and associated access road.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a small scatter of approximately 20 flakes and one scraper. In 2008 the surface inventory was significantly expanded to more than 100 flakes, diagnostic Middle Prehistoric dart points, scrapers, and biface fragments. Surface visibility was obviously hampered by dense vegetation during the original recording.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, with many more artifacts showing up after the burn. Fire breaks cut around the outer perimeter of the site and two flakes are exposed in the disturbed area. Disturbance is limited to the narrow fire break and much of the site remains undisturbed.

Recommendations: Avoid additional impacts by leaving soil ricks in place or have them leveled by hand. Conduct cultural monitoring of any additional rehabilitation activities.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-25
Monitor Name(s): Brenda R. Pace, John Koudelka
Monitor Date(s): July 28, 2008

Site Name/Number: 10-BT-571
Reason for monitoring: Confirmation of site location in relation to proposed new project activities at the Infiltration Basin Area

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Light offroad vehicle travel along the grazing boundary fence
Significance of Impact: Vehicle travel along the fence is sporadic and has not created a formal road.
Site remains largely undisturbed.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: N/A

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a light lithic scatter with approximately 60 flakes, a small triangular biface, and a bison horn sheath. In 2008, fewer artifacts were observed and chipped stone or organic artifacts were seen.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, though fewer artifacts were spotted in 2008. Light disturbance from vehicle use along the grazing boundary fence is noted, but not significant. Activities associated with the Infiltration Basin project are well to the south and should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities at the Infiltration Basin.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-26
Monitor Name(s): Brenda R. Pace, John Koudelka
Monitor Date(s): July 28, 2008

Site Name/Number: 10-BT-1086
Reason for monitoring: Confirmation of site location in relation to proposed new project activities at the Infiltration Basin Area

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a thin scatter of approximately 20 flakes with no chipped stone tools. In 2008, fewer artifacts were observed.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, though fewer artifacts were spotted in 2008. No impacts were apparent. Activities associated with the Infiltration Basin project are well to the south and should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities at the Infiltration Basin.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-27
Monitor Name(s): Brenda R. Pace, John Koudelka
Monitor Date(s): July 28, 2008

Site Name/Number: 10-BT-1087
Reason for monitoring: Confirmation of site location in relation to proposed new project activities at the Infiltration Basin Area

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a scatter of approximately 20 flakes, nondiagnostic projectile points and biface fragments. In 2008, only a few flakes were observed.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, though fewer artifacts were spotted in 2008. No impacts were apparent. Activities associated with the Infiltration Basin project are well to the south and should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities at the Infiltration Basin.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-28
Monitor Name(s): Brenda R. Pace, John Koudelka
Monitor Date(s): July 28, 2008

Site Name/Number: 10-BT-1075
Reason for monitoring: Confirmation of site location in relation to proposed new project activities at the Infiltration Basin Area

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a thin scatter of approximately 50 flakes, one of which exhibited light use wear. In 2008, only a few flakes were observed.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985, though fewer artifacts were spotted in 2008. No impacts were apparent. Activities associated with the Infiltration Basin project are well to the south and should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities at the Infiltration Basin.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-29
Monitor Name(s): Brenda R. Pace, John Koudelka
Monitor Date(s): July 28, 2008

Site Name/Number: 10-BT-1068
Reason for monitoring: Confirmation of site location in relation to proposed new project activities at the Infiltration Basin Area

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this site was described as a dense scatter of hundreds of flakes, a nondiagnostic projectile point fragment and several biface fragments. In 2008, a similar assemblage was observed.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1985. No impacts were apparent. Activities associated with the Infiltration Basin project are well to the south and should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities at the Infiltration Basin.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-31
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): September 16, 2008

Site Name/Number: 10-BT-1438
Reason for monitoring: Confirmation of site location in relation to proposed project activities (new monitoring wells) near Naval Reactors Facility

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: E-mail Phone Official correspondence, CCN#: _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1988, this site was described as a dense scatter of flakes with a large inventory of chipped stone tools including a large side-notched dart point, seven scrapers, eight biface fragments, and several fragments of ground stone. In 2008, a similar assemblage was observed.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1988. No impacts were apparent. Activities associated with the NRF Sewer Upgrade and new monitoring wells as currently planned should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities around the built environment of NRF. Touch base with NRF environmental personnel in summer of 2009 to make sure plans for new wells have not changed and site remains protected.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-32
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): September 16, 2008

Site Name/Number: 10-BT-1436
Reason for monitoring: Confirmation of site location in relation to proposed project activities (new monitoring wells) near Naval Reactors Facility

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1988, this site was described as a dispersed scatter of approximately 80 flakes 9 along with one small corner-notched arrow point, a drill, three biface fragments, and sherds of Intermountain Ware pottery. A pronounced ridge line on the edge of the artifact scatter also yielded a possible hunting blind. In 2008, a similar artifact assemblage was observed but the hunting blind was not re-identified.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1988. No impacts were apparent. Activities associated with the NRF Sewer Upgrade and new monitoring wells as currently planned should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities around the built environment of NRF. Touch base with NRF environmental personnel in summer of 2009 to make sure plans for new wells have not changed and site remains protected.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: GPS coordinates obtained

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-34
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): September 23, 2008

Site Name/Number: 10-BT-1209
Reason for monitoring: Confirmation of site location in relation to proposed project activities along powerlines near the Power Burst Facility

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): During original recording, some disturbance was noted as a result of the powerline road, which runs through the site area.

Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? Yes No

If yes, describe: _____

Work Halted? Yes No

If yes, describe: N/A

Notifications: None required under Type 1 finding

Primary contact(s): N/A

Date contacted: N/A

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? Yes No

If yes, describe: In 1985, this site was described as a contained scatter of more than 200 flakes along with one small corner-notched arrow point. A similar assemblage of artifacts was observed in 2008.

Cultural Materials collected? Yes No

If yes, describe: N/A

General Comments: The site appears similar to that reported in 1988. No impacts were apparent aside from the road and powerline activities noted during the original recording. Activities associated with the powerline testing should have no effect on the site if they are restricted to the existing road.

Recommendations: Include this site in periodic monitoring of activities in the PBF area. Mark sensitive stretch of road through site area with flagging tape to prevent offroad incursions during fiber optic installation on existing poles.

Attach additional documentation, as warranted (photos, profiles, etc.) Yes No

If yes, describe: GPS coordinates obtained

A: Historic Archaeological Sites

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-16
Monitor Name(s): Brenda R. Pace
Monitor Date: May 7, 2008

Site Name/Number: 10-BT-2194/Powell Stage Station/Long Saddle Trench
Reason for monitoring: Routine surveillance of archaeological sites impacted by the Big Lost River Trenches project

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Heavy equipment originally. Recontoured areas with new plants sprouting appear to be attractive to local antelope and deer. Grazing by these native ungulates has increased and so have the associated impacts (trampling, sleeping areas, paths).

Significance of Impact: None of the impacts from native ungulates are significant.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Backfilling and revegetation carefully designed to prevent disturbance outside the original area of potential effect.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: Shoshone-Bannock Tribes
Primary contact(s): Caroline Smith
Date contacted: Multiple communications
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Trenches were originally placed inside the boundaries of this historic stage station. Artifacts and cultural features occur throughout the area and were observed during the backfilling and revegetation operations in undisturbed areas around the trenches.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Backfilling activities began on August 28 and finished on September 6, 2007, and revegetation followed on October 8-9, 2007. Project personnel were cooperative and concerned about cultural resource protection, minimizing impacts as much as possible at all times.

Recommendations: Continue yearly monitoring.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-01
Monitor Name(s): Hollie Gilbert and Julie Braun
Monitor Date: June 17, 2008

Site Name/Number: 10-BT-2194/Powell Stage Station
Reason for monitoring: Routine check

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No new impacts noted.
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: _____
Primary contact(s): _____
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Last year badger activity was reported in the southeast corner of the stage stations foundation however, this year it appears that no new badger activity occurred around the foundation or within its immediate area. Additionally, DOE conducted a floodplain trenching project several years ago within the proximity of this site. This year the trenches were backfilled and revegetated. CRM personnel closely monitored this activity in order to avoid impacts to a historic road and bridge abutments associated with the stage station. The sensitive areas were avoided and no impacts were incurred.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The area is still recovering from a 2000 wildlands fire. Grasses are predominant. Also, DOE's floodplain trenching project is in close proximity to the site. CRM monitoring is recommended when trenches are back filled and during revegetation efforts.

Recommendations: Monitor annually

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-02
Monitor Name(s): Hollie Gilbert
Monitor Date: 6/18/08

Site Name/Number: Birch Creek Stage Station
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): _____
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: In 2007 it was noted that the area was being used for a temporary sheep camp. In the past it did not appear that this activity directly impacted the site's structural remains however overuse could pose a threat in the future. Sheep disturbance was noted to be on the northern periphery of the site's general area where only vegetation appeared to be disturbed. It appears that this year the area was not used by shepherders.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: _____

Primary contact(s): N/A

Date contacted: _____

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**

If yes, describe: Structural features still visible; house foundation and other rock features such as possible flower bed borders and a walk way. The soils where it is assumed the barn/corrals were is still devoid of vegetation except for halogeton and very scant short grasses. Typical trash (i.e. broken glass, nails, cans scattered around site) distributed throughout area. Additional items noted are window pane glass and square nails.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Monitor annually

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-03
Monitor Name(s): Hollie Gilbert and Julie Braun
Monitor Date: 08/21/08

Project:
Site Name/Number: Richard's Homestead
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No recent impacts were noted; however this site has probably been looted in the past.

Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: _____

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: _____

Primary contact(s): N/A

Date contacted: _____

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**

If yes, describe: This site contains all of the artifacts you would expect at a homestead on the INL; i.e. basalt foundations, broken glass and ceramics, nails, farm equipment pieces and domestic items, just to name a few. Other noticeable features include an area where they stored or chopped fire wood and also hand dug ditches and a small reservoir area that historically was fed by Birch Creek.

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: This site is located along a primary route to an active gravel pit on the INL and is probably visited often by passersby. Because of this site's close proximity to public roadways and a gravel access road it should be monitored annually.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-04
Monitor Name(s): Hollie Gilbert and Julie Braun
Monitor Date: 8/21/08

Project: _____
Site Name/Number: Kuharski Homestead
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Badger /rodent burrowing
Significance of Impact: _____

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: _____
Primary contact(s): N/A
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: During last year's monitoring visit it was discovered that a badger was burrowing just south of the house foundation in a concentration of brick that is thought to have been a blacksmithing forge. This year's monitoring found that no further disturbance has occurred.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Because of this sites close proximity to public lands, it should be monitored annually.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-33
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date(s): September 16, 2008

Site Name/Number: 10-BT-1370/Wilkins Homestead
Reason for monitoring: Confirmation of site location in relation to proposed project activities (new sewer ponds) near Naval Reactors Facility

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): No impacts
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1988, this site was described as a historic trash scatter with architectural features including a dugout, privy, and corral. Domestic debris (cans, bottles, china, lantern, etc.), construction debris (wood, nails, sheet metal, etc.), machinery (stone parts, plow parts, mower parts), and stock debris (harness parts, barbed wire, buckets, horseshoe nails) were included in the assemblage. In 2008, the artifact assemblage and features appeared unchanged. Archival research has identified W. T. Wilkins as the homesteader who filed on these lands with the Big Lost River Irrigation Co. in 1909.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: The site appears similar to that reported in 1988. No impacts were apparent. Activities associated with the NRF Sewer Upgrade as currently planned should have no effect on the site.

Recommendations: Include this site in periodic monitoring of activities around the built environment of NRF. Touch base with NRF environmental personnel in summer of 2009 to make sure plans for new ponds have not changed and site remains protected.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-30
Monitor Name(s): Brenda R. Pace, Hollie Gilbert, Julie Braun
Monitor Date: September 9, 2008

Site Name/Number: LMIT-96-51-03
Reason for monitoring: Magnetometer surveys for unexploded ordnance (UXO) are utilizing a 6-Wheeler and a lightweight cart offroad to identify buried UXO. Project activities are being monitored to assess impacts to known cultural sites.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): 6-Wheeler/cart driving offroad, animal activity
Significance of Impact: Vehicle and cart leave shallow tracks through soft surface soils but do not impact harder gravel deposits. Impacts to ground surfaces appear to be minimal, not much greater than intensive pedestrian activity. All surface soils in this area are heavily impacted by gophers, ground squirrels, and badgers.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: At the present time, 6-Wheeler/cart surveys are restricted to areas previously surveyed for archaeological resources to assess impact and suitability for limited future deployment in unsurveyed areas. These areas are largely undisturbed.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Extensive concentration of cans, glass, ceramics, and other metal artifacts. Features (basalt igloo oven, tent platforms, privy, etc.) are indicated by basalt cobbles, leveled areas, and depressions. Site is probably associated with canal construction in the early 1900s. Some distinctive artifacts (e.g. stove parts) have been moved since the original recording and last monitoring visit, indicating that people are visiting the site.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: On the floodplain deposits in this area, offroad use of the 6-Wheeler and cart does not appear to adversely impact historic archaeological materials. Faint tracks are visible through softer soils, but not on flood gravels. No surface artifacts were displaced or broken. Impacts are comparable to intensive foot traffic. Geophysical data collected from the site area may be valuable in identifying additional hidden cultural features at this site.

Recommendations: Conduct additional monitoring if subsurface ordnance are flagged for cleanup/remediation inside the boundaries of this site. Analyze geophysical data (magnetometer) collected from this location during the survey. Consider additional mapping and artifact collection if unauthorized visitation continues.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken

A: Historic Trails

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-05
Monitor Name(s): Hollie Gilbert and Julie Braun
Monitor Date: 8/20/08

Site Name/Number: Goodale's Cutoff/ T-1
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): _____
Significance of Impact: It appears that Goodale's Cutoff has been heavily used by cattle and ranchers this year. Areas along the road where salt licks have been placed are heavily trampled by cattle leaving deep ruts outside of the existing two tracks. Water tanker trucks and ranching vehicles have traveled the road extensively leaving the trail very powdery in places and causing soil erosion the rockier spots along the route exposing more rocks and making the trail rougher. BLM road grading activities that occurred several years ago from the point where T-1 cross the western INL border and continuing for several miles east are still very visible.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: _____
Primary contact(s): N/A
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Various lithic scatters were noted along the route. However they were not formerly monitored. Where the road intersects basalt outcrops and ridges; wear from the wagon wheels and in some cases iron/rust stains are still visible on rock surfaces. It should also be noted that there are other visible sections (small side routes) of the road that weave in and out along the entire current route.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: _____
Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: HKG-08-06
Monitor Name(s): Hollie Gilbert and Julie Braun
Monitor Date: 8/20/08

Site Name/Number: Powell's Stage Road /T-2
Reason for monitoring: routine

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): _____
Significance of Impact: No visible impacts were found along the section of T-2 that spans the INL. If there were any sheepherding activities along this route earlier this Spring, they were kept to a minimum and no noticeable recent sheep camps were located.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: _____

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: _____
Primary contact(s): N/A
Date contacted: _____
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? **Yes** **No**
If yes, describe: Various historic and prehistoric sites are scattered along the route, however none of them were formerly monitored. Where the road intersects basalt outcrops and ridges; wear from wagon wheels and in some cases iron/rust stains are still visible on rock surfaces. It should also be noted that there are other visible sections (small side routes) of the road that weave in and out along the entire current route.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Monitor annually
Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-11
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Site Name/Number: Blackfoot-Little Lost River Road / T-20
Reason for monitoring: Routine surveillance of archaeological sites in vicinity of National Security Explosive Test Range

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Powerline road that intersects T-20 is very heavily used now. Project personnel were discouraged from using T-20 as a turnaround or staging area but trailer and temporary flag pole were placed there in 2007. Vehicles have flattened the area and are affecting the integrity of the primitive two-track. By May 2008, problems were corrected and impacts were halted.

Significance of Impact: Impacts are cumulative and will become adverse in time. Corrected by May of 2008.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: Heavy use of the intersection of T-20 and the powerline road is creating a flattened area and it is becoming difficult to distinguish the primitive two-track. Impacts halted by May of 2008 with relocation of the flag pole.

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding

Primary contact(s): N/A

Date contacted: N/A

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: _____

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Powerline and road maintenance have caused significant impacts to portions of this site. Continued use of the intersection for turnaround and flag placement will cause additional impacts, creating a wider corridor of disturbance. Corrective actions initiated by May, 2008.

Recommendations: Require project personnel to move flag trailer to another less sensitive location. Continue to monitor trail because it is so convenient for project use/abuse as turnaround area.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

A: Experimental Breeder Reactor I – National Historic Landmark

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: JBB-08-01
Monitor Name(s): Julie Braun
Monitor Date: May 7, 2008

Site Name/Number: Experimental Breeder Reactor Complex (EBR-601 and EBR-602)
National Historic Landmark status
Reason for monitoring: National Historic Landmark status

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Poor water drainage system. Guardhouse has several impact agents, most caused by neglect. They include rodents, biological growth on roof, moisture causing shingles to curl, leaking roof, potential for lead paint.

Significance of Impact: Not significant

Did disturbance or impact extend into undisturbed areas? Yes No

If yes, describe: _____

Work Halted? Yes No

If yes, describe: _____

Notifications: None required by Type I impact determination

Primary contact(s): _____

Date contacted: _____

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:** _____

Cultural Materials observed? Yes No

If yes, describe: EBR I is a cultural resource.

Cultural Materials collected? Yes No

If yes, describe: _____

General Comments: EBR I is being well maintained by the BEA Facilities organization and a new roof is planned.

Recommendations: Findings and prioritization of issues are included in the EBR I Preservation Plan. Treatments of issues should be scheduled and completed based on priority and available funding. Cleaning staff should be trained to spot and report issues to the EBR-I landlord as soon as they arise. The landlord should maintain a logbook of issues, when they were reported, when they are scheduled for treatment, and when and how treatment was completed.
Continue to monitor annually.

Attach additional documentation, as warranted (photos, profiles, etc.) Yes No

If yes, describe: _____

A: Projects

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-35
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: October 24, 2007 and May 20, 2008

Project: National Security Explosive Test Range
Reason for monitoring: Check on project compliance with cultural resource recommendations

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Road maintenance, parking, equipment storage and setup, explosive testing
Significance of Impact: In 2007, impacts were extending outside established roadways, laydown and test areas. Impacts were minor, but cumulative and well outside the limits established in the NEPA Environmental Assessment. Corrective actions were implemented by May of 2008.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Early in FY 2008, project activities are extending beyond survey boundaries and into undisturbed adjacent zones. Impacts are minor, but cumulative and becoming problematic. Archaeological sites on the edges of laydown areas and along the T-25 access road are jeopardized. In May of 2008, problems have been corrected.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Early in FY 2008 project activities are extending into unsurveyed areas and may be impacting cultural materials. By May, 2008, problems have been corrected

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Problems with project creep into unsurveyed/undisturbed areas adjacent to developed roads, laydown and test areas were documented early in the fiscal year during a site visit by INL Cultural Resources and other BEA and DOE environmental personnel. Corrective actions were initiated and implemented by May of 2008. This included monitoring of sensitive archaeological sites near roads and laydown areas, relocation of Range flag away from T-20 historic trail, cultural resource training of Range personnel, incorporation of 30 ft fire buffer into existing laydown and test areas, establishment of turnouts in nonsensitive areas, and archaeological survey and resource avoidance ahead of installation of signs around the Range Safety Fan.

Recommendations: Continue monitoring for continued compliance with recommendations for site protection. Consider marking sensitive stretches and/or additional data collection at archaeological sites along the sides of the road.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-19
Monitor Name(s): Brenda R. Pace, Hollie Gilbert, Julie Braun
Monitor Date: May 14, 2008

Project: Long Term Ecological Sampling
Reason for monitoring: Project surveillance to confirm compliance with cultural resource recommendations.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): None
Significance of Impact: None

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: None

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: N/A

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Project is in compliance with cultural resource recommendations and no adverse impacts have occurred or are anticipated. Surveys are requested of sampling plots that have not been inventoried for cultural resources. Project activities have limited impact (GPS mapping, setting and checking small traps, vegetation samples, small surface soil samples, driving to and from test plots). Cultural resource awareness training requirements met.

Recommendations: Continue monitoring these activities, particularly in culturally sensitive areas.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-22
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: April 8, April 22, June 4, and July 11, 2008

Project: Powerline Testing at PBF and MFC
Reason for monitoring: Project surveillance to confirm compliance with cultural resource recommendations and monitoring of ground disturbance in sensitive areas.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Project activities located to avoid known archaeological sites and road upgrades were not conducted.

Significance of Impact: None

Did disturbance or impact extend into undisturbed areas? **Yes** **No**

If yes, describe: None

Work Halted? **Yes** **No**

If yes, describe: N/A

Notifications: None required under Type 1 finding

Primary contact(s): N/A

Date contacted: N/A

Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**

If yes, describe: N/A

Cultural Materials collected? **Yes** **No**

If yes, describe: N/A

General Comments: Project is in compliance with cultural resource recommendations and no adverse impacts have occurred or are anticipated. New equipment pads were placed to avoid archaeological sites and monitoring of ground disturbance revealed no unanticipated discoveries. Road upgrades were not necessary after a change in the weather.

Recommendations: Continue monitoring these activities, particularly in culturally sensitive areas.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**

If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-01
Monitor Name(s): Brenda R. Pace
Monitor Date: October 8-9, 2007

Project: Big Lost River Trenches
Reason for monitoring: Active observation of new ground disturbance per the requirements of an Memorandum of Agreement between DOE-ID, the Advisory Council, and Idaho SHPO and consultation with the Shoshone-Bannock Tribes

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): 4 WD trucks, heavy equipment, foot traffic
Significance of Impact: Disking and seeding equipment travelled over previously disturbed area and sagebrush seedlings were placed by hand. No impacts occurred beyond the original disturbed area.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: Revegetation activities carefully designed to prevent disturbance outside the original area of potential effect.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: Shoshone-Bannock Tribes
Primary contact(s): Caroline Smith, JoEtta Buckhouse, LaRae Buckskin
Date contacted: Multiple communications
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: Trenches were originally excavated with heavy equipment inside the boundaries of prehistoric lithic scatters as well as the historic Powell State Station. Sites impacted include 10-BT-2194, 10-BT-2189, 10-BT-2193, and 10-BT-2192. Trenches were backfilled Aug 28 – Sept 6, 2007, with full-time cultural resource monitoring. No additional artifacts or cultural features were observed as the trenches were closed. Artifacts and cultural features occur in all areas and were observed during the backfilling operations in undisturbed areas around the trenches. No new materials were observed during the revegetation effort described in this form.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Revegetation activities began on October 8, 2007 and finished in two days. Heritage Tribal Office representatives were informed of work, but could not be present during the work. Project personnel were cooperative and concerned about cultural resource protection, minimizing impacts as much as possible. As a result, no new impacts occurred and no new artifacts were observed.

Recommendations: Monitor revegetation progress in 2008.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-36
Monitor Name(s): Brenda R. Pace, Hollie Gilbert
Monitor Date: May 12, August 5, and September 9, 2008

Project: Geophysical Surveys at the Fuze Burn and Dairy Farm Ordnance Areas
Reason for monitoring: Magnetometer surveys for unexploded ordnance (UXO) are utilizing a 6-Wheeler and a lightweight cart offroad to identify buried UXO and flag it for future remediation. These project activities are being monitored to determine if the offroad activity results in impacts to known historic and prehistoric archaeological sites.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): 6-Wheeler/cart driving offroad, animal activity
Significance of Impact: Vehicle and cart leave shallow tracks through soft surface soils but do not impact harder gravel deposits. Impacts to ground surfaces appear to be minimal, not much greater than intensive pedestrian activity.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: At the present time, 6-Wheeler/cart surveys are restricted to areas previously surveyed for archaeological resources to assess impact and suitability for limited future deployment in unsurveyed areas. These areas are largely undisturbed.

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: 6-Wheeler/cart passed through the boundaries of one known archaeological site (LMIT-96-51-03—canal construction camp) with no appreciable negative impacts.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: On the floodplain deposits at the Fuze Burn and Dairy Farm areas, offroad use of the 6-Wheeler and cart does not appear to adversely impact historic archaeological materials. Faint tracks are visible through softer soils, but not on gravel surfaces. No artifacts were displaced or broken. Impacts are comparable to intensive foot traffic. Geophysical data may be useful in archaeological research applications.

Recommendations: Continue monitoring offroad surveys in the vicinity of NODA. Carefully evaluate any proposals to expand offroad surveys to other settings and soils as impacts may be higher where soils are sandier and less consolidated. Complete intensive archaeological surveys in advance of any proposed cleanup or remediation resulting from these surveys. Directly monitor any proposed removal of ordnance from inside the boundaries of known cultural resources.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-14
Monitor Name(s): Brenda R. Pace
Monitor Date(s): May 5, 2008

Project: Test Area North Demolition Landfill
Reason for monitoring: Project surveillance to confirm compliance with cultural resource recommendations.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): Surrounding area has been disturbed by heavy equipment depositing construction waste from demolition and covering with dirt fill taken from the nearby embankment. Archaeological materials remain undamaged from these activities. Natural erosion does continue to impact the site.

Significance of Impact: No direct impacts to archaeological site as a result of Landfill operations. Setting has been changed, but after revegetation it should return to approximate pre-Landfill appearance.

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: N/A

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: **E-mail** **Phone** **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: In 1985, this locality was originally recorded as an isolated Elko corner-notched dart point. In 2003, the artifact assemblage was significantly expanded to include a small scatter of debitage, a steep end scraper, and 40 sherds of Intermountain Ware pottery from a classic flat-bottomed pot. No new artifacts were observed in 2008.

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: Fences placed around the perimeter of the site have prevented damage. Artifacts appear to be untouched, indicating that unauthorized collection has not been a problem. Site appears undisturbed except for changes to the surrounding landscape and the setting of the site. These impacts will be minimized by rehabilitation planned when the landfill is closed.

Recommendations: Continue monitoring for continued compliance with recommendations for site protection. Arrange to have fences removed when landfill is closed.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: _____

**Idaho National Laboratory Cultural Resource Management Office
Field Monitoring Form**

Monitor Number: BRP-08-37
Monitor Name(s): Brenda R. Pace
Monitor Date: October 29, 2007 and April 22, June 4, June 17, September 15, 2008

Project: Critical Infrastructure Test Range Complex (CITRC, formerly Power Burst Facility) soil disturbance
Reason for monitoring: Routine monitoring of ground disturbing activities within the CITRC/PBF area particularly in the vicinity of PER-632 and the Waste Experimental Reduction Facility (WERF) where human remains have been discovered in secondary (10-BT-1991) and original (10-BT-2046) contexts and as required by LWP-8000 and MCP-3480.

Findings: **Type 1** **Type 2** **Type 3** **Type 4**

Impact Agent(s): None
Significance of Impact: N/A

Did disturbance or impact extend into undisturbed areas? **Yes** **No**
If yes, describe: N/A

Work Halted? **Yes** **No**
If yes, describe: N/A

Notifications: None required under Type 1 finding
Primary contact(s): N/A
Date contacted: N/A
Contact Method: | **E-mail** | **Phone** | **Official correspondence, CCN#:**

Cultural Materials observed? **Yes** **No**
If yes, describe: N/A

Cultural Materials collected? **Yes** **No**
If yes, describe: N/A

General Comments: No artifacts or human remains observed in project excavations (tank removal, berm removal, waterline removal, excavation for new equipment pad).
Recommendations: Continue routine monitoring of excavation projects in this sensitive area per the requirements of LWP-8000, MCP-3480, and the wishes of the Shoshone-Bannock Tribes.

Attach additional documentation, as warranted (photos, profiles, etc.) **Yes** **No**
If yes, describe: photographs taken