FIRST ANNUAL REPORT


March 31, 2010

Bonneville Power Administration

Bureau of Reclamation

U.S. Army Corps of Engineers
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PURPOSE

This is the First Annual Report under the Systemwide Programmatic Agreement for the Management of Historic Properties Affected by the Multipurpose Operations of Fourteen Projects of the Federal Columbia River Power System for Compliance with Section 106 of the National Historic Preservation Act (Systemwide PA). The report summarizes actions and planning efforts undertaken by Bonneville Power Administration (BPA), the Bureau of Reclamation (Reclamation), and the U.S. Army Corps of Engineers (Corps) under the Systemwide PA in support of Federal agency compliance. The reporting period begins in 1997, when the agencies first provided joint funding from power revenues and appropriated funds for cultural resource management activities at the 14 Federal Columbia River Power System (FCPRS) Projects. For this specific report, the reporting period ends September 30, 2009.

The First Annual Report presents baseline data against which future progress of the joint FCRPS Cultural Resource Program (Program) will be measured, and documents Agency efforts to satisfy the terms of the Systemwide PA. In future years, the reporting period will be the fiscal year from October 1 to September 30. Annual reports will be distributed to consulting parties to the Systemwide PA.

Annual reporting requirements are detailed in Section VIII of the Systemwide PA. This First Annual Report presents summary information in narrative and tabular form, and contains highlights of selected compliance work completed at individual projects in appendices that follow the main report body. BPA, Reclamation, and the Corps (Agencies) will continue to add information about compliance accomplishments in future years as more information becomes available.

BACKGROUND


The FCRPS Cultural Resource Program is jointly administered by BPA, Reclamation, and the Corps. The Program enables the three Agencies to coordinate Program cultural resources management compliance actions at 14 hydroelectric projects (Projects) in the Columbia and Snake River basins of the Pacific Northwest Region (Figure 1).

Agency relationships within the FCRPS and individual Agency responsibilities for compliance with cultural resource management laws and policies are detailed in the FCPRS Cultural Resource Handbook (2005) and are not reiterated here. Briefly, Reclamation operates and maintains two Projects, and the Corps operates and maintains 12 of the 14 FCRPS Projects. BPA markets power generated by the 14 Projects. The Agencies share responsibility for addressing impacts to historic properties caused by Project operations and maintenance.

The undertaking covered by this Systemwide PA is the operation and maintenance of the 14 Columbia and Snake River Federal hydropower dams of the FCRPS for all of their multiple authorized purposes. The undertaking includes all construction (routine and non-routine) and operation and maintenance activities required for current and future operation of the FCRPS (Systemwide PA Attachment 5).

The following non-exclusive list contains examples of activities and programs that are not covered under the terms of the Systemwide PA because, for instance, they are covered by another Programmatic Agreement, are not part of the undertaking, or the Lead Federal Agencies comply through individual Section 106 reviews:
FIGURE 1
Location of the 14 Federal Columbia River Power System Hydroelectric Projects.
• Canals, ditches, and laterals and facilities (other than facilities at Grand Coulee Dam) that are associated with Reclamation's Columbia Basin Project.
• Construction and maintenance of BPA’s transmission system.
• BPA Fish and Wildlife Program activities, including, for example, funding the acquisition of mitigation lands.
• Compliance with NAGPRA, Sections 5, 6 & 7.
• Corps Section 10/404 Regulatory Permits.
• Actions by agencies other than the Lead Federal Agencies, when those other agencies are implementing FCRPS Project purposes which by agreement are the responsibility of those other agencies. Examples include: implementation of recreation purposes (e.g., campground construction and maintenance by the USDA Forest Service), or fish mitigation actions by other agencies (e.g., U.S. Fish and Wildlife Service-managed fish hatcheries).

The current Program took form in the 1990s during the Columbia River System Operation Review (SOR). The SOR, conducted by BPA, Reclamation, and the Corps was performed to develop a coordinated system for operating and managing multiple uses of the FCRPS. Analysis and projected affects were documented in the Columbia River System Operation Review Final Environmental Impact Statement (FEIS) (SOR 1995).

Each Agency issued a Record of Decision (ROD) for the SOR FEIS in 1997. Each ROD describes individual Agency commitments to comply with requirements of Section 106 of the National Historic Preservation Act (NHPA) to address the adverse effects of Project operations on significant cultural resources. The RODs commit the Agencies to complete a Programmatic Agreement (PA) for compliance with Section 106 of NHPA. A Systemwide PA went into effect on October 6, 2009. The Agency RODs also committed to complete a Historic Property Management Plan (HPMP) for each Project that would address NHPA as well as the Archaeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and the American Indian Religious Freedom Act (AIRFA).

Program Funding Commitment
The SOR analysis led agency managers to recognize that the Program would require a reliable and sufficient source of funding to achieve Section 106 compliance commitments in the RODs. In 1997, agency executives agreed to jointly fund a $4.5 million annual cultural resources Program for an initial period of 15 years. The funding was apportioned at $3 million total for the 12 Corps Projects and $1.428 million for the two Reclamation Projects, annually. All three agencies contribute funds consistent with a cost allocation defined for the operation and maintenance (O&M) of the Projects. BPA provides power revenues to cover joint costs of power generation. The Corps and Reclamation provide congressionally appropriated funding to cover the joint non-power portion of the operating costs at each Project.

Cultural Resource Management Before 1997
Synopsis of Major Cultural Resource Management Activities
Cultural resource management work occurred across the Columbia River basin prior to the joint funding agreement in 1997. Principal work pertinent to the 14 FCRPS Projects, both prior to and after 1997, is summarized briefly here. More detailed information about archaeological compliance work in the Columbia River basin, beginning in 1910 and continuing in several episodes from the mid-1940s through 1997, is available in the FCRPS Cultural Resource Handbook (2005: Appendix D), and in Project Appendices that accompany this report.
The summary that follows is derived from the FCRPS Cultural Resources Handbook (2005). Documentation of archaeological sites in the Columbia River Basin began in 1910. Early documentation is the product of work performed by museums and universities, and private collectors. Documented archaeological survey, excavation, and collection between 1910 and 1945 includes reconnaissance work in the middle Columbia and Yakima River valleys conducted by the American Museum of Natural History; excavations and reconnaissance survey of the Bonneville Dam pool area by the U.S. National Museum in 1926 and 1927; site documentation efforts in The Dalles-Deschutes river areas in 1932 and 1933; and the survey, testing, and excavation performed by Columbia River Basin Archaeological Survey between 1939 and 1940, mainly at Grand Coulee Dam.

From 1947 to 1959, several survey and excavation projects were coordinated by the Smithsonian Institution, the National Park Service (NPS), and the Corps. The Smithsonian River Basin Surveys resulted in reconnaissance of the Columbia and Snake Rivers and some of their tributaries. The Chief Joseph Dam, The Dalles Dam, and the McNary Dam areas were focal points of this reconnaissance survey, which took place between 1948 and 1957. Data recovery occurred in these locations between 1952 and 1957. Smaller-scale efforts took place at the proposed Albeni Falls and Libby Dams.

National Park Service implemented CRM work at the John Day, Chief Joseph, Grand Coulee, and Snake River Projects between 1960 and 1974 on behalf of Reclamation and Corps. After 1974, Reclamation and the Corps began direct implementation of the programs at all 14 Projects. Construction and operation of the 3rd Power Plant at Grand Coulee Dam led to intensive survey, test excavation, and data recovery at both Grand Coulee and Chief Joseph Dams, as the latter had to be raised 10 feet in order to accommodate added generators to deal with flow increases resulting from operation of the 3rd power plant upstream. Significant archaeological survey, testing and mitigation projects were conducted along the Kootenai River throughout 1977-1979 in preparation of the proposed Libby Additional Units and Reregulating Dam (LAURD) which was not constructed.

In 1991, the Inter-tie Development and Use Programmatic Agreement (IDU PA) went into effect at the five FCRPS storage reservoirs: Dworshak, Libby, Albeni Falls, Hungry Horse, and Grand Coulee. The IDU PA made BPA funding available for performing Section 106 compliance work at these Projects to address the effects of reservoir operations for power generation. This resulted in intensive surveys and testing at archaeological sites in drawdown zones at Hungry Horse, and additional survey and some testing at Grand Coulee. During this period, archaeological site evaluations and paleoenvironmental studies were completed at Albeni Falls Dam. Data from monitoring and survey efforts were synthesized by the KNF at Libby Dam and Lake Koocanusa. Additionally, data recovery excavations have been conducted on the shores of Lake Koocanusa at Bristow Creek. Inventory survey at Dworshak, conducted under the IDU PA, identified 233 archaeological sites, 187 of which were isolates.

In the mid 1990s, the Agencies began analysis to assess effects of proposed SOR operational alternatives. Databases containing information about recorded sites at the 14 Projects were created as part of this analysis. These databases contain site counts for each Project and characterize National Register eligibility work as of 1995. Information in these databases is presented in the First Annual Report as the baseline for measuring Program achievements after FCRPS funding was made available in 1997. This SOR data is compared with information about Program accomplishments from 1997 through September 2009 in the following sections.
FCRPS CULTURAL RESOURCES PROGRAM STATUS AND ACCOMPLISHMENTS: 1997-2009

FCRPS Cultural Resource Program achievements to date are measured in terms of actions taken by BPA, Reclamation, and the Corps to address compliance with Cultural Resource protection laws, and other needs identified during the SOR. The program addresses Section 106 of the National Historic Preservation Act (NHPA), and Section 3 of NAGPRA and ARPA where there is overlap with activities normally considered part of NHPA compliance.

Program achievements presented in the following sections are organized by Section 106 compliance process phase. Descriptions of Program accomplishments are further broken down by Project. NHPA compliance phases are described in the NHPA implementing regulations at 36 CFR Part 800 as:

1. Determination of whether a Federal action constitutes an “undertaking” under NHPA
2. Identification of Historic Properties
   a) Determine the Area of Potential Effects
   b) Identify Historic Properties
   c) Evaluate Historic Significance
3. Assessment of Effects
4. Resolution of Adverse Effects

Section 106 NHPA Compliance

Determination of Whether a Federal Action Constitutes an “undertaking” Under NHPA

The term “undertaking” is defined at 36 CFR Part 800.16(y) as “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval". The FCRPS Systemwide PA further clarifies that the FCRPS undertaking includes the multiple authorized purposes of the 14 FCRPS Projects, all construction (routine and non-routine), operation and maintenance activities required for current and future operation (Systemwide PA 2009:43 and 49). The FCRPS undertaking is atypical in that it is ongoing, rather than having defined beginning and end points.

In the 1990s during the System Operations Review, the three Lead Federal Agencies determined that the operation of the FCRPS Projects for all authorized purposes constitutes a Federal undertaking with the potential to affect historic properties. These determinations were restated for the five storage Projects in the IDUPA (1991), and most recently, in the FCRPS Systemwide PA (2009:2). The Systemwide PA also acknowledges that the FCRPS “undertaking has caused, is causing, and shall cause in the future direct, indirect, and cumulative effects” (Systemwide PA:2009:2).

Identification of Historic Properties

Determine the Area of Potential Effects

The APE for the FCRPS is “the geographic area(s) within which the undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties
exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." (SWPA 2009:43). The undertaking:

- Can include U.S. fee or easement lands, lands held in trust, private lands, or other lands for which the U.S. holds no property interest or access rights
- May be discontinuous or interrupted, excluding geographic areas where the undertaking does not cause effects

Project-specific APEs will be determined in consultation with consulting parties at the Project level. The APE definition process is in various stages across the system (Table 1). Four Projects have defined APEs, although APE acreages have not been calculated for all four of these Projects. Projects with defined APEs include the Chief Joseph, Albeni Falls, Libby, and Hungry Horse Projects. The APE at these Projects comprises all Federal fee and easement lands obtained by the Federal government for the purposes of Project operation.

APEs for the remaining 10 Projects in the system are in various stages of development. The status of APE definition at each Project is briefly summarized in the following pages. Additional information, including a description of APE work accomplished to date, data assumptions, and acreage calculation methods is in the Project supplemental information provided in Appendices C -P of this report.

Projects with Defined APEs

Chief Joseph Dam: The APE for the Chief Joseph Dam has been defined, and includes all lands within the exterior real estate take line for the Project between Columbia River Mile (CRM) 545, where the dam is located, to Grand Coulee Dam 51 miles upstream. The APE definition is based on Corps Seattle District real estate maps for the Project, as well as verified boundary monuments. The APE for the Chief Joseph Project is 16,049 acres in size. The acreage of the original river area at ordinary low water is not included in this figure.

Albeni Falls Dam: Albeni Falls Dam extends along 65 miles of the Pend Orielle River basin in northern Idaho. The APE for this Project has been provisionally defined and is based on Corps Seattle District GIS data. GIS data is derived from Federal fee land units that have been mapped on the ground, and a digitized 2080 foot amsl map contour line. Efforts to digitize the 2048 foot amsl (the low water line) are on-going, and aided by pre-reservoir maps and photos, and LiDAR data. The estimated acreage of Albeni Falls Project lands is 19,332. The acreage of the original river and lake area at ordinary low water is not included in this figure.

Libby Dam: Libby Dam is on the Kootenai River 222 miles upstream from its confluence with the Columbia River. The Project is 90 miles long, and spans the U.S.-Canada border. The APE for this Project is 29,626 acres, and is defined as lands directly or indirectly affected by present and reasonably foreseeable future Project operations both above and below Libby Dam. For the purposes of this report, the APE includes the full pool area with the addition of a 300 foot buffer area extending laterally from the full pool elevation line. The acreage of the original river area at ordinary low water is not included in this figure.
# TABLE 1
Project Lands, Area of Potential Effects, and Survey/Inventory.

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Project Acres (Fee &amp; Easement Lands)*</th>
<th>APE Acres</th>
<th>Project Acres Ordinarily Accessible for Survey</th>
<th>APE Mapped</th>
<th>Acres Surveyed before FCRPS Program (as of 1996) or w/ Other Funding Sources</th>
<th>Acres Surveyed with FCRPS Program Funds (1997-2009)</th>
<th>Cumulative Total Project Acres Surveyed</th>
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<tr>
<td><strong>Corps Portland District Projects</strong></td>
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<td>No</td>
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<td><strong>31,690</strong></td>
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<td><strong>Corps Walla Walla District Projects</strong></td>
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<td>17,090</td>
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<td>No</td>
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<td>1,712</td>
<td>2,908</td>
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<td>Ice Harbor</td>
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<td>360</td>
<td>4,850</td>
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<td>Little Goose</td>
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<td>Chief Joseph</td>
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<td>4,217</td>
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<td>Albeni Falls</td>
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<td>Contour-based w/ mapped fee parcels</td>
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<td>122</td>
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<td>Libby**</td>
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<td>Project</td>
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<td>APE Acres</td>
<td>Project Acres Ordinarily Accessible for Survey</td>
<td>APE Mapped</td>
<td>Acres Surveyed before FCRPS Program (as of 1996) or w/ Other Funding Sources</td>
<td>Acres Surveyed with FCRPS Program Funds (1997-2009)</td>
<td>Cumulative Total Project Acres Surveyed</td>
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<td><strong>80,612</strong></td>
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* Figures represent Federally-owned fee and easement lands.

** Includes Corps fee and easement lands, and lands obtained by the Corps for the Project and later transferred to the Kootenai National Forest at the Libby Project. Project Acreage figures for Libby also include lands taken for the Libby Additional Units Re-regulating Dam which was never built.
Hungry Horse: The APE at the Hungry Horse Project is lands taken for Project purposes, and lands where a direct or indirect effect from Project operations can be reasonably foreseen. This includes lands extending from the dam upstream to the boundary of the wild and scenic area boundary on the South Fork of the Flathead River. Within the reservoir this encompasses shoreline areas between elevations 3,336 and 3,560 feet above mean sea level. The APE also includes lands in downstream reaches outside of Project boundaries where there is no current Federal ownership or legal interest, but where adverse effects are occurring to historic properties are a result of the Federal undertaking (Schwab et.al. 2006:7). The total number of acres within the APE has not been calculated, but the portion on Reclamation Project lands is 22,261 acres. This includes acres not normally accessible because it lies below the elevation to which the reservoir can be drafted (i.e., it is permanently inundated by the reservoir).

Projects where APEs are Currently Being Defined

Bonneville Lock and Dam Project: The APE for the Bonneville Project has not been fully defined (Wernz et.al. 2006:5). The Project extends from river mile 145.5 upstream for 47 miles to The Dalles dam, and affects Corp-managed lands, as well as other Federally administered, State, County, private, and Tribal lands. Corps-managed lands at the Project total 2,472 acres. The Wana Pa Koot Koot Cooperating Group has initiated discussions about defining the APE for the Bonneville Project, and BPA GIS staffs are working with Corps Portland District real estate staff to convert existing digital Project boundary records into GIS shape files.

The Dalles Lock and Dam project: The Dalles Project extends from the dam upstream for 24 miles to the John Day Project. Like the Bonneville Project, the APE has not been fully defined. Project lands total 6586 acres at The Dalles Project. This number may change as other Federal, State, County, Tribal, and private lands affected by operation of the Project are identified (Wernz et.al 2005:5).

John Day Project: The John Day Historic Property Management Plan defines the Project APE as all Corps lands beginning 3.8 kilometers below the John Day Dam and extending to 2.1 kilometers below McNary Dam. It includes all inundated areas, and portions of the John Day River, Willow Creek, Rock Creek, and the Umatilla River. The APE also includes non-Corps lands and lands not inundated but affected by the Project (Dickson 2002). Project lands total 48,224 acres. APE acreage may change as non-Corps lands affected by the Project are identified.

McNary Lock and Dam: McNary Lock and Dam at Columbia River Mile 292, and extends up the Columbia River about 27 miles, and up the Snake River to Ice Harbor Lock and Dam. No APE determination has been made for this Project. Project lands total 17,090 acres.

Ice Harbor Lock and Dam: Ice harbor Lock and Dam occurs at Snake River Mile (SRM) 9.7 and extends 32 miles upstream to Lower Monumental Dam. Project lands total 7,830 acres. APE for direct effects to archaeological sites has been determined. Delineation of the APE for indirect effects and TCPs is is currently underway, and a topic being addressed by the Payos Kuus Cuukwe Cooperating Group. The APE will be documented in the Ice Harbor Historic Properties Management Plan (currently in draft form).

Lower Monumental Lock and Dam: Lower Monumental Lock and Dam encompasses 8,800 acres of Project lands starting at SRM 41.6 and extending up-river for 28 miles to Little Goose Lock and Dam. The APE for this Project has not been determined, but Project lands total 8,800 acres.

Little Goose Lock and Dam: The Little Goose Lock and Dam Project extends 37 miles up the Snake River from SRM 70.3 to Lower Granite Lock and Dam. Project lands include 11,455 acres. No APE determination has been made for this Project.
Lower Granite Lock and Dam: Project lands at Lower Granite Lock and Dam include 10,200 acres. No APE has been defined for the Project, which occurs at SRM 107.5 and extends 39 miles up river to Lewiston, ID.

Dworshak Dam and Reservoir: Dworshak Dam and Reservoir is at river mile 1.9 of the North Fork Clearwater River. The Project extends 53 miles upstream, and Project lands equal 30,935 acres. The APE has not been defined for this Project.

Grand Coulee Dam: Grand Coulee Dam is at RM 596.6 on the Columbia River and the associated reservoir (Lake Franklin D. Roosevelt) extends roughly 145 miles upstream. Project lands for Grand Coulee total 90,933 acres, including acreage that lies below minimum pool. The APE is currently being defined in discussion with members of the two Cooperating Groups at this Project. Minimally, the APE will include lands within the exterior real estate take line for the Project. Lands for which fee title or easement was obtained for the Project extend from the dam up the Columbia to RM 729 and lie below the 1310 foot elevation; lands below the dam down to RM 590 affected by operation of the power plants; and some additional lands around the reservoir or downstream of the dam associated with recreation, slides, and other Project needs. The reservoir also extends up tributary rivers and streams, including the Spokane River to RM 29 and the Kettle River to RM 10. It is known that lands up to RM 741 along the Columbia were not taken for Project purposes and yet are directly affected by the reservoir. It is likely that additional lands extending beyond areas of direct effect will be incorporated in to the APE, either associated with direct operational effects or particularly for considering effects to traditional cultural properties.

Identify Historic Properties (Inventory)
The identification of historic properties, also referred to as “inventory”, can include performing archival research; oral history or ethnographic interviews; field survey and documentation of archaeological and/or historic sites; field visits with Tribal elders, cultural specialists, or other knowledgeable informants; and other appropriate activities that allow Agency staffs to learn about the location, type, significance, and condition of cultural resources affected by an Agency action, in this case, the operation and maintenance of the FCRPS. Consultation with Native American Tribes, State and Tribal Historic Preservation Offices, and members of the public is also a component of inventory. In the FCRPS, “inventory” is reported separately as Archaeological/Historic Site Survey, Archaeological/Historic Site Documentation, and Traditional Cultural Inventory.

Archaeological/Historic Site Survey
Archaeological/Historic site inventory is the identification of prehistoric sites and/or historic sites, including identification of standing historic buildings and structures. Inventory accomplishments are reported as acres surveyed on the ground and/or number of sites identified and documented. Archival research and coordination with tribes, other government organizations, and members of the public are performed as part of any field inventory effort and are not reported separately.

Table 1 displays the amount of survey performed as part of the archaeological/historic site inventory at the 14 FCRPS Projects to date. The ultimate goal of archaeological/historic site inventory is survey of all accessible areas, or areas with the potential for sites, within the Area of Potential Effect (APE) for each Project. Past work has focused on inventory of Project lands within the APE that are most effected by Project operation, generally seasonally inundated surfaces along eroding shorelines.

At least 116,573 acres have been surveyed to date at the 14 FCRPS Projects. This represents 32% of Project lands. At the time of the SOR (1995), 35,961 acres (10%) had
been surveyed across the system. Approximately 80,612 acres were surveyed between 1997 and 2009 as a result of FCRPS funding being made available.

As of 2009, survey coverage at individual Projects across the system ranges from 17% at the McNary and Dworshak Projects to greater than 100% at Bonneville, The Dalles, and Lower Monumental Projects. At some Projects, such as Chief Joseph Dam, Grand Coulee Dam, Albeni Falls Dam, and Libby Dam, the total area inventoried may be underestimated because information from existing maps and records has not yet been added to the FCRPS geodatabase (This information will be available by the next reporting cycle). At other Projects, such as Bonneville and The Dalles, survey coverage may be an over-estimate of areas surveyed because early surveys of certain areas may not have been performed to current standards, and so reassessment of areas was necessary.

It should be noted that not all FCRPS-funded survey performed to date meets current survey standards. Some survey reported in Table 1 is “reconnaissance” level survey that is not sufficient to satisfy current inventory requirements or to identify all potential archaeological and historic sites. Areas not surveyed to current inventory standards will need to be reevaluated in the future.

Archaeological/Historic Site Documentation
There has been a significant increase in the number of recorded properties at the Projects as a result of the surveys conducted since 1997. In 1995, 2,223 archaeological and historic sites had been recorded at the 14 FCRPS Projects. Site counts ranged from six sites at the Hungry Horse Dam Project to 388 sites at the Albeni Falls Dam Project (Table 2).

Archaeological/Historic Site Documentation performed between 1997 and 2009 located an additional 1,571 sites for a total of 3,794, increasing the number of known archaeological and historic sites in the system by over 41 percent. Site counts are lowest at the Hungry Horse Dam Project (21), and highest at the Grand Coulee Dam Project (605). The Bonneville, Lower Monumental, and Hungry Horse Dam Projects show the greatest percentage increase (over 70%) in site count since FCRPS funding became available.

Traditional Cultural Inventory
Traditional Cultural Inventory includes all archival research, ethnographic work, interviewing Tribal Elders and cultural specialists, field work, and other appropriate activities related to identifying and describing Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSITs) (see NHPA, Section 101(d)(6)(A)) and Traditional Cultural Properties (Parker and King 1998).

Traditional Cultural Inventory has been a significant Program component since 1997. At least 25 individual HPRCSITs and TCP studies referencing hundreds of place names, landscape features, villages, trails, and other traditional places are contained in these studies (Table 3). Twenty three of these studies were conducted with FCPRS Program funds. Studies contain references to as many as 800 potential HPRCSITs and TCPs. The total number of HPRCSITs and TCPs has yet to be determined and will be reported as part of future work required under the FCRPS Systemwide PA. The Systemwide PA commits the Agencies to compile a list and description of previous and current efforts to identify, evaluate, and treat HPRCSITs related to the undertaking. It also commits the Agencies to defining minimum standards and processes for identification, documentation, and evaluation of HPRCSITs in consultation with affected tribes, SHPOs, THPOs, and other agencies.
TABLE 2
Archaeological/Historic Sites Documented*

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Number of Sites before FCRPS Program (as of 1996)</th>
<th>Total Number of Sites Identified Since FCRPS Program Funds Became Available (1997-2009)</th>
<th>Total Number of Sites at Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corps Portland District Projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonneville</td>
<td>21</td>
<td>66</td>
<td>87</td>
</tr>
<tr>
<td>The Dalles</td>
<td>57</td>
<td>88</td>
<td>145</td>
</tr>
<tr>
<td>John Day</td>
<td>203</td>
<td>78</td>
<td>281</td>
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<tr>
<td>District Total</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>McNary</td>
<td>127</td>
<td>179</td>
<td>306</td>
</tr>
<tr>
<td>Ice Harbor</td>
<td>33</td>
<td>34</td>
<td>67</td>
</tr>
<tr>
<td>Lower Monumental</td>
<td>35</td>
<td>172</td>
<td>207</td>
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<tr>
<td>Little Goose</td>
<td>76</td>
<td>17</td>
<td>93</td>
</tr>
<tr>
<td>Lower Granite</td>
<td>141</td>
<td>18</td>
<td>159</td>
</tr>
<tr>
<td>Dworshak</td>
<td>214</td>
<td>309</td>
<td>523</td>
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<td>District Total</td>
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</tr>
<tr>
<td>Chief Joseph</td>
<td>347</td>
<td>72</td>
<td>419</td>
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<tr>
<td>Albeni Falls</td>
<td>375</td>
<td>17</td>
<td>392</td>
</tr>
<tr>
<td>Libby</td>
<td>250</td>
<td>239</td>
<td>489</td>
</tr>
<tr>
<td>District Total</td>
<td>972</td>
<td>328</td>
<td>1,300</td>
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<tr>
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<td>338</td>
<td>267</td>
<td>605</td>
</tr>
<tr>
<td>Hungry Horse</td>
<td>6</td>
<td>15</td>
<td>21</td>
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<tr>
<td>Unit Total</td>
<td>344</td>
<td>282</td>
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<tr>
<td>TOTAL</td>
<td>2,223</td>
<td>1,575</td>
<td>3,796</td>
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</table>

* Table shows sites documented before FCRPS funding was available, and those identified between 1997 and 2009 with FCRPS funds. With the exception of site data reported for the Walla Walla District, Washington Department of Archaeology and History Preservation site data is not included and may increase the total number of sites in the system.
TABLE 3
FCRPS Traditional Cultural Studies

<table>
<thead>
<tr>
<th>Project</th>
<th>Number of TCP Studies Conducted Before FCRPS Funding was Made Available (as of 1996)</th>
<th>Number of TCP Studies Conducted Since FCRPS Funding was Made Available (1997-2009)</th>
<th>Total TCP Studies</th>
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<tbody>
<tr>
<td>Corps Portland District Projects</td>
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<td></td>
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<tr>
<td>Bonneville</td>
<td>0</td>
<td>8 Across Entire District</td>
<td>8 Across Entire District</td>
</tr>
<tr>
<td>The Dalles</td>
<td>0</td>
<td>8 Across Entire District</td>
<td>8 Across Entire District</td>
</tr>
<tr>
<td>John Day</td>
<td>0</td>
<td>8 Across Entire District</td>
<td>8 Across Entire District</td>
</tr>
<tr>
<td>District Total</td>
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<td>8</td>
</tr>
<tr>
<td>Corps Walla Walla District Projects</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>McNary</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>Ice Harbor</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>Lower Monumental</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>Little Goose</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>Lower Granite</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>Dworshak</td>
<td>0</td>
<td>3 Across Entire District</td>
<td>3 Across Entire District</td>
</tr>
<tr>
<td>District Total</td>
<td>0</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Corps Seattle District Projects</td>
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</tr>
<tr>
<td>Chief Joseph</td>
<td>1</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Albeni Falls</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Libby</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>District Total</td>
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<td>5</td>
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</tr>
<tr>
<td>Reclamation Projects</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Grand Coulee</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Hungry Horse</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Unit Total</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>3</td>
<td>22</td>
<td>25</td>
</tr>
</tbody>
</table>
Evaluate Historic Significance (Evaluation)

Once archaeological sites, historic sites, and TCPs or HPRCSITs (collectively “Properties”) are identified, they must be evaluated for significance in American history, society or culture (36 CFR Part 60) to ascertain whether they are eligible for the National Register of Historic Places and thus qualify as “Historic Properties”. The evaluation process includes field testing/excavation and documentation, further background or archival research, ethnographic research, collections research, transcription of notes, translation of interviews, researching traditional uses, etc. This work is labor intensive and can take years to complete. As a result, the outcomes of evaluation work (a National Register eligibility determination) may still be in process and thus are not reflected in these report results. Evaluation represents a sizeable portion of Program work accomplished with FCRPS funds.

Site “significance” is measured against four criteria. It should be noted that the significance of a site may change through time as technology used to acquire data improves and new research questions emerge. To be determined eligible for, or listed on the National Register, a property must possess “The quality of significance in American history, architecture, archeology, engineering, and culture”, and be a district, site, building, structure, or object “that possess integrity of location, design, setting, materials, workmanship, feeling, and association and”

   a) Be associated with events that have made a significant contribution to the broad patterns of our history and

   b) Be associated with the lives of persons significant in our past; or

   c) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

   d) Yield, or may be likely to yield, information important in prehistory or history.

The National Register criteria for evaluation are applied to all types of Properties under NHPA. In addition to these criteria, TCPs must meet the criteria in National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties. This bulletin defines TCPs as being associated “with cultural practices or beliefs of a living community that

   a) Are rooted in that community’s history, and

   b) Are important in maintaining the continuing cultural identity of the community.”

Accomplishments for the evaluation of Properties are presented only for Archaeological/Historic Sites in this report (Table 4). Although considerable efforts have been made to identify Traditional Cultural Sites (HPRCSITs and TCPs), documentation for evaluation work has not been fully reviewed. The evaluation status of Traditional Cultural sites (generally evaluated against criteria a – c of the National Register criteria for evaluation) will be reported in the second Annual Report required under the Systemwide PA (see PA Section VIII.A.2).

The number of properties documented and evaluated for the period before and after 1997 at each Project is summarized in Table 4. The majority of National Register evaluations at the 14 FCRPS Projects to date are for significance under criterion d, information potential. A few sites post-dating European contact have also been evaluated against criteria a-c. Records as of 1995 show that of the 2,223 recorded sites, at least 720 had been evaluated for National Register eligibility through test excavations and other means. Outcomes of the evaluations included the establishment of 14 National Register Districts, a Historic Landmark,
### TABLE 4
Archaeological/Historic Site National Register of Historic Places Evaluation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No. of Sites (as of 2009)</td>
<td>Total No. Sites Evaluated as of 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corps Portland District</td>
<td></td>
<td></td>
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<tr>
<td>Bonneville</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>The Dalles</td>
<td>90</td>
<td>90</td>
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<tr>
<td>John Day</td>
<td>275</td>
<td>165</td>
</tr>
<tr>
<td>District Total</td>
<td>410</td>
<td>294</td>
</tr>
<tr>
<td>Corps Walla Walla District</td>
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<td></td>
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<tr>
<td>McNary</td>
<td>306</td>
<td>52</td>
</tr>
<tr>
<td>Ice Harbor</td>
<td>67</td>
<td>12</td>
</tr>
<tr>
<td>Lower Monumental</td>
<td>207</td>
<td>42</td>
</tr>
<tr>
<td>Little Goose</td>
<td>93</td>
<td>6</td>
</tr>
<tr>
<td>Lower Granite</td>
<td>159</td>
<td>25</td>
</tr>
<tr>
<td>Dworshak</td>
<td>523</td>
<td>3</td>
</tr>
<tr>
<td>District Total</td>
<td>1,355</td>
<td>140</td>
</tr>
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<tr>
<td></td>
<td>Total No. of Sites (as of 2009)</td>
<td>Total No. Sites Evaluated as of 2009</td>
</tr>
<tr>
<td></td>
<td><strong>Corps Seattle District</strong></td>
<td></td>
</tr>
<tr>
<td>Chief Joseph</td>
<td>347</td>
<td>210</td>
</tr>
<tr>
<td>Albeni Falls</td>
<td>375</td>
<td>57</td>
</tr>
<tr>
<td>Libby Dam</td>
<td>250</td>
<td>193</td>
</tr>
<tr>
<td>District Total</td>
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<td>460</td>
</tr>
<tr>
<td><strong>Reclamation Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Coulee</td>
<td>605</td>
<td>27</td>
</tr>
<tr>
<td>Hungry Horse</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Unit Total</td>
<td>626</td>
<td>27</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,363</td>
<td>921</td>
</tr>
</tbody>
</table>

* Includes sites listed individually, sites listed as part of National Register Districts or evaluated as non-contributing elements to National Register Districts, and sites listed as part of Multiple Property Nominations. Also includes sites determined eligible or not eligible through Section 106 consultation with appropriate SHPOs and THPOs.

** Site numbers for the Corps Walla Walla District represent sites tested or excavated for purposes of data recovery prior to inundation or during draw-downs, and were not tested specifically for the purpose of completing National Register eligibility determinations.
and the National Register listing or nomination of several individual sites (SOR Appendix D 1995:2-23 and 2-24). As evaluation work during the pre-FCRPS period focused on reporting status of eligible sites and often did not report much detail on sites found not eligible, not evaluated, or needing further evaluation, it was not possible to abstract information needed to present column-by-column comparisons of pre- and post-FCRPS National Register outcomes beyond the description contained in the SOR appendices and a tally of the evaluation efforts. This report instead identifies the current, cumulative National Register status, and highlights evaluation activities performed after 1997. Cumulative results will be the basis against which continued progress on evaluation under the Systemwide PA will be measured. Appendices C-P contain additional information about National Register evaluation work performed at each Project to date.

Between 1997 and 2009, an additional 201 properties were evaluated for significance against the National Register criteria, for a total of 921 sites for which eligibility determinations have been made. Two hundred fifty three were either listed on the National Register, or have been determined eligible through consultation with State or Tribal Historic Preservation Officers since 1997. Sites evaluated as not eligible, or not contributing to the National Register eligibility of a District through FCRPS-funded work, number 115. Not all sites within a District have been evaluated as contributing or non-contributing. Eligibility recommendations have been made for 592 sites, but additional documentation, analysis, and consultation are required before the eligibility determination process is complete. The status of 2,348 sites is currently unevaluated.

**Assessment of Effects**

Federal Agencies are required to assess the effects of their actions on National Register eligible properties and determine whether those Properties are adversely affected by Agency actions. In the case of the FCRPS, effects of operation and maintenance of hydroelectric Projects are continuous. Effects include but are not limited to inundation and periodic exposure; wave action; bank slumping; landslides; exposure of materials in the drawdown zone to looters or incidental collection; recreational uses such as hiking, fishing or camping; water run-off; livestock grazing; and impeded access to traditional cultural places.

Effects from Project operations are measured through monitoring programs implemented at individual Projects annually. Monitoring provides information that serves several purposes. Information collected is used to support effect determinations and National Register eligibility determinations, evaluate the effectiveness of treatments and mitigation (see the following section titled **Resolve Adverse Effects**), and aids planning future work needs.

FCRPS-funded monitoring programs are currently in place at all 14 Projects. Monitoring frequency is based on the nature of effects at sites and the type of information being collected. Because reservoirs are dynamic environmental settings with frequent sediment movement, monitoring sometimes leads to identification of previously undocumented sites.

**Resolution of Adverse Effects**

Agencies are required to resolve adverse effects to National Register eligible sites. Resolution of adverse effects is sometimes referred to as “mitigation” or “treatment”, and can include an array of activities including but not limited to:

- Erosion control (bank stabilization and soil stabilization)
- Installation of exclosures (fences or other structures)
- Data recovery (research, analysis of existing collections, site documentation, or site excavation)
- Vegetation control (invasive weed removal)
• Public education and outreach programs (lectures, presentations at conferences, production of educational DVDs, etc.)
• Informational publications or presentations to professional audiences
• Installation of cultural resource protection signs
• Site monitoring or other actions to reduce looting and vandalism

Stabilization, Data Recovery, and Public Education

The FCRPS historic properties management Program has funded several resolutions of adverse effects to cultural sites. The number of sites undergoing data recovery increased from 78 to 117. Bank stabilization projects have been implemented at 28 sites as of September 2009. Only 5 bank stabilization projects were implemented prior to the FCRPS Program.

Public education has increased substantially since FCRPS funds became available. Educational displays appear at 12 Corps, Reclamation, Tribal, and State-operated visitor centers in Oregon, Washington, Montana, and Idaho. Eleven public information brochures have been produced or are in development at 13 of the 14 FCRPS Projects. Program funds have also supported the production and development of 12 CDs/DVDs created by Cooperating Groups at four different Projects. Other public education efforts include popular books, installation of ARPA signs, site monitoring, law enforcement training, and presentations in public schools.

Curation

Summary data on collections curated is another activity performed to resolve adverse effects. Curation is a necessary outcome of some evaluation and mitigation activities such as testing, and data recovery excavations. Artifacts collected form Federal or State lands during inventory, evaluation, and other organized excavations, or in some cases as a result of damage assessment or ARPA violations, must be curated in perpetuity. One extremely important facet of curation is cataloging and maintenance of paper and digital records of project investigations and activities, including TCP data. This is a continuous Program cost that increases annually depending on inflation rates, facility upgrades, collection housing upgrades, and other factors. Every repository has its own guidelines, requirements and fee structure that must be taken into account when considering curation procedures and costs under the Program.

Summary data on collections curated with FCRPS funding are shown in Table 5. Curated items include artifacts (reported in cubic feet of space), and records (reported in linear feet). Artifacts and associated records are curated for all 14 Projects. FCRPS Program funding supports the curation of 5,627 cu. ft. of artifacts and 438 linear ft. of associated records. Between 2004 and 2009 the cost for curation of FCRPS collections totaled $1,250,900.00. Prior to 2004, curation was not tracked as a separate Program cost. Furthermore, not all repositories that house FCRPS collections charge annual curation fees. In future it will be important to report curation status of digital data, including but not limited to databases, report copies, GIS data, photographic data, and administrative records.
<table>
<thead>
<tr>
<th>Project</th>
<th>Artifacts (cu. ft.)</th>
<th>Records (linear ft)</th>
<th>Repositories with Curation Agreements</th>
<th>Temporary Curation Facilities or No Curation Agreement</th>
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<tr>
<td></td>
<td>FY04</td>
<td>FY05</td>
<td>FY06</td>
<td>FY07</td>
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<tr>
<td>Bonneville</td>
<td>625</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Burke Museum, Seattle, WA; Yakama Museum, Toppenish, WA</td>
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<td>The Dalles</td>
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<td>0</td>
<td>融化</td>
<td>$</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Collections from all Portland District Projects curated at Univ. of OR, at no charge</td>
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<td>293</td>
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<td>---------------------</td>
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<td>182</td>
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<td>$30,000 $32,000 $34,000 $35,000 $37,000 $39,000</td>
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<td>N/A</td>
<td>$ - $ - $ - $ - $ - $ -</td>
</tr>
<tr>
<td>Libby</td>
<td>391</td>
<td>73</td>
<td>Confederated Salish and Kootenai Tribal Curation Facility</td>
<td>$57,000 $49,000 $52,000 $54,000 $57,000 $59,000</td>
</tr>
<tr>
<td>District Total</td>
<td>2293</td>
<td>255</td>
<td></td>
<td>$87,000 $81,000 $86,000 $89,000 $94,000 $98,000</td>
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<tr>
<td>Project</td>
<td>Artifacts (cu. ft.)</td>
<td>Records (linear ft)</td>
<td>Repositories with Curation Agreements</td>
<td>Temporary Curation Facilities or No Curation Agreement</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Ice Harbor, Lower Monumental, Lower Granite, Little Goose, McNary</td>
<td>2180</td>
<td>94</td>
<td>Washington State University, Pullman, WA</td>
<td>$235,000 $77,000 $61,000 $42,000 $53,000 $43,000 $511,000</td>
</tr>
<tr>
<td>District Total</td>
<td>2180</td>
<td>94</td>
<td>$235,000 $77,000 $61,000 $42,000 $53,000 $43,000 $511,000</td>
<td></td>
</tr>
<tr>
<td>Reclamation Collections</td>
<td></td>
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<tr>
<td>Grand Coulee</td>
<td>485</td>
<td>247</td>
<td>Colville Confederated Tribes Curation Facility, Nespelem, WA</td>
<td>Not Available $26,499 $117,299 $55,656 $63,728 $55,119 $318,301</td>
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<td>Hungry Horse</td>
<td>1</td>
<td>Unknown</td>
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<td>Unknown</td>
<td>$150 $26,649 $117,449 $55,806 $63,878 $55,269 $319,201</td>
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<tr>
<td>TOTAL</td>
<td>5,627</td>
<td>438</td>
<td>$348,150 $185,150 $179,150 $163,150 $191,150 $184,150 $1,250,900</td>
<td></td>
</tr>
</tbody>
</table>

* Curation fees funded through FCRPS program. Collections curated at no charge are not listed, except for Albeni Falls.
** FY04 Walla Walla total includes curation fees, curation inventory, and sufficiency assessment.
*** Costs for Grand Coulee collections housed with the Spokane Tribe of Indians shown in FY07, but not for other years (numbers unavailable).
Consultation, Communication, and Coordination
Public involvement processes during the System Operations Review identified a need to address the effects of operating the hydropower system on cultural sites and historic properties, and to define a mechanism to assure effective coordination between the Agencies, Native American Tribes, other land-managing Federal agencies (agencies affected by but not responsible for addressing Project impacts), and members of the public. Coordination with Native American Tribes, other Federal and State agencies, and members of the public is an on-going activity. Consultation and coordination are not reported as a separate component of NHPA, but assumed to be one component inherent to all NHPA phases.

Tribes and consulting parties that participate in the Program today were identified as part of the public involvement process associated with the System Operations Review and include the Native American Tribes, State and Tribal Historic Preservation Offices, and other Federal and State agencies with lands affected by but not responsible for FCRPS effects. Tribes and consulting parties participate in the Program formally through meetings, letters, and occasional government-to-government consultations between Agency and Tribal officials. More often, consulting parties provide technical advice and assistance to the Agencies through participation in eight Cooperating Groups. Cooperating Groups and members are listed in Appendix B.

ARPA and NAGPRA
Section 3 of NAGPRA, or inadvertent discovery of human remains and funerary objects, and the initial phases of ARPA are partially covered under FCRPS joint funding when inadvertent discoveries are associated with Project operations. For Corps Projects, only initial identification efforts to determine if remains are Native American, or determination of whether a site has been damaged (ARPA) are included in the FCRPS Program. All subsequent steps of the ARPA and NAGPRA processes are tracked, funded and reported through other programs. Funding does support seasonal ARPA patrols at the Bonneville, The Dalles, and the John Day Projects.

For Reclamation Projects, ARPA patrols are funded at Grand Coulee. NAGPRA monitoring and post-discovery work is performed, but is presently implemented solely by Reclamation as a separate program that is not supported with FCRPS funds. While some sites may be monitored under both the joint and NAGPRA programs, joint FCRPS funding is not applied to NAGPRA at Reclamation Projects.

MANAGEMENT ACTIVITIES
Program administration and management is a Program component for Agency cultural staffs and includes planning; budget development and management; coordination, facilitation and documentation of quarterly and monthly Cooperating Group meetings; contract administration; Section 106 consultation; records management; and development of planning documents such as HPMPs, 5-year Plans, Annual Work Plans, and Programmatic Agreements. The Agencies have also prepared a Charter and Handbook for the Cultural Resources Subcommittee, and agreements that document administrative and budgetary processes between BPA and the Corps, and BPA and Reclamation.

Annual and 5-year Plans are currently in place at all 14 Projects. Project-specific Programmatic Agreements have been drafted for three Projects. Other agreements that formalize FCRPS funding and Program Participant roles, or that influence Program administration are listed below.
**FCRPS Documents and Agreements that Guide Program Implementation**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>Programmatic Agreement for Compliance with the National Historic Preservation Act Among Bonneville Power Administration, the Bureau of Reclamation, Pacific Northwest Region; U.S. Army Corps of Engineers, North Pacific Division; National Park Service, Pacific Northwest Region; U.S. Forest Service, Region 1; Confederated Tribes of the Colville Reservation; Spokane Tribe of Indians; Idaho, Montana, and Washington State Historic Preservation Officers; and the Advisory Council on Historic Preservation Regarding Federal Columbia River Power System Hydroelectric Operations (also referred to as the Intertie Development and Use Programmatic Agreement)</td>
</tr>
<tr>
<td>1996</td>
<td>Memorandum of Agreement between Bonneville power Administration and the Corps of Engineers for Direct Funding power Operations and Maintenance Costs at Corps Projects</td>
</tr>
<tr>
<td>1996</td>
<td>Memorandum of Agreement executed by the United States of America Department of Energy acting by and through the Bonneville Power Administration and the United States of America Department of the Interior acting by and through the Bureau of Reclamation (Direct Funding Power Operations and Maintenance Costs at Reclamation Projects).</td>
</tr>
<tr>
<td>1997</td>
<td>System Operations Review Records of Decision (BPA, Corps, and Reclamation)</td>
</tr>
<tr>
<td>2003</td>
<td>Memorandum of Agreement Number 1425-03-MA-10-3830 between Bureau of Reclamation and Bonneville power Administration for Mutually Agreed Upon Historic Properties Investigations at Lake Roosevelt and Hungry Horse Reservoir.</td>
</tr>
<tr>
<td>2005</td>
<td>MOA Among the Bureau of Reclamation, Bonneville Power Administration, Confederated Tribes of the Colville Reservation, and Washington State Historic Preservation Officer for Mitigation Treatments for Damage to Site 45GR664, Grant County, Washington.</td>
</tr>
<tr>
<td>2009</td>
<td>Systemwide Programmatic Agreement for the Management of Historic Properties Affected by the Multipurpose Operations of Fourteen Projects of the Federal</td>
</tr>
</tbody>
</table>
Columbia River Power System for Compliance with Section 106 of the national Historic Preservation Act.

As part of FCRPS Program implementation, HPMPs have been completed at 13 Projects across the system. One HPMP is in draft form. HPMPs are living management documents that identify short and long term goals and objectives, set priorities, and identify management needs and corresponding budgets. They are designed to be updated with current information and are adjusted to address changing Project needs. An HPMP review and revision schedule has been developed for each Project and will be part of each Project’s long-term plan. Cultural overviews and Cultural Resource Management Plans also exist for several Projects. HPMPs completed with FCRPS funds are listed below.

**Historic Property Management Plans**


Program Expenditures: 1997-2009

FCRPS Program expenditures between 2004 and 2009 total $22,650,668.00. Reclamation Projects have expended $6,033,000.00, and Corps Projects have expended $15,431,668.00. Table 6 displays approximate expenditures for each phase of the Section 106 compliance process for this time period. Prior to 2004, records were not organized by compliance phase, and so expenditures for individual compliance activities are not shown.

Corps administration and management activities have been charged to the program since the beginning of the joint funding agreement. In addition to the above activities, Corps in-house costs associated with Engineering and Construction, NEPA (National Environmental Policy Act) analysis, Design, Contracting, Notetaking, and other types of internal technical support are included in the program administration and management category.

For Reclamation, costs shown include cultural resource management work funded through contracts, and some engineering, design, and NEPA work. Contributions to Systemwide expenses, such as GIS work are also included. The cost of Reclamation staff salaries and travel expenses are not shown.

The cost of BPA Program staff participation in the FCRPS Cultural Resources Program are not shown in Table 6. These costs are covered by a separate program budget and are not charged to the FCRPS Program joint funds.

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>FCRPS Program Expenditures: FY 2004-Present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* USACE</td>
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<tr>
<td>Planning</td>
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<td>Inventory</td>
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<td>Evaluation</td>
<td>$755,878.00</td>
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<td>Treatment</td>
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<td>Curation</td>
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<td>Oral History/TCP inv./eval.</td>
<td>$1,398,496.00</td>
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<td>Law Enforcement</td>
<td>$749,142.00</td>
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<td>Program Administration</td>
<td>$5,145,040.00</td>
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<tr>
<td>Participation/Elder Grants</td>
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<tr>
<td>System-wide Expenses</td>
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</tr>
<tr>
<td>TOTALS</td>
<td>$15,431,668.00</td>
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</tbody>
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* Monitoring costs included in Treatment
CONCLUSIONS

In the 13 years since the FCRPS Cultural Resource Program began, the Agencies have made great strides in bringing the Projects into compliance with Federal historic property management requirements. A key indicator of progress is the completion of Historic Property Management Plans (HPMP) at 13 of the 14 Projects that help guide each Project's compliance program over both short and long terms. Several have been completed very recently and incorporate the stipulations of the Systemwide PA, but others are being revised and updated in light of the Systemwide PA. Each HPMP contains material that is essential to developing the system-wide research design over the next two years, as stipulated in the Systemwide PA.

Identify Historic Properties (Inventory)

Archaeological inventory of areas that are most frequently affected by ongoing hydroelectric operations at each Project is now largely complete. For the storage reservoirs, this is the area between high pool and normal low pool, plus the upland area along the high pool shoreline that is being actively eroded. The run-of-river Projects all have inventory along the actively eroding high pool shoreline. Inventories of upland project areas above the active erosion zone also have been advanced for both kinds of Projects, but not to completion in most cases. Nor have inventories been entirely completed of lands between the normal low and conservation pools at most Projects. No Projects have complete inventory of permanently inundated lands between the conservation pool and the ordinary high water line of the original river, which would be an area of concern during extreme drawdown events or in cases of dam breaching and removal. Overall, inventory during the FCRPS Program has increased the total site tally by 41 percent. Inventory in priority areas for maintenance outside the immediate shoreline impact zone and within the APE will continue as necessary. Administrative high-maintenance zones are immediate priorities at many Projects.

One of the most salient contributions of the FCRPS Program has been in supporting studies to inventory TCPs at the Projects. Before the Program began, only three such studies had been completed. Twenty-two have taken place under the current program. Continued studies are expected at many Projects.

Evaluation and Assessment of Project Effects

Evaluation of candidate historic properties for National Register eligibility also has advanced under FCRPS, particularly in completion of paperwork to document eligibility status. Evaluation has not kept pace with inventory. However, in 1997, about 32% of the total inventory of 2,223 sites had been evaluated, but by 2010, only 27% of the greatly expanded inventory of 3,363 sites have been evaluated. Many archaeological sites and potential TCPs remain unevaluated, particularly on lands where the Government has less than fee real estate interests. Future Program efforts will continue in both categories, following priorities set out in Project HPMPs.

Resolution of Adverse Effects

Although cultural resources management work at the Projects during the pre-FCRPS period resulted in substantial data recovery prior to Project construction (78 data recovery projects), only five in-situ stabilization projects had been completed by 1997. In the 13 years that the FCRPS Program has been in place, 39 sites have undergone data recovery and 28 sites have been stabilized. There also have been major developments in public education in the form of exhibits, brochures, information sign installation, books, and video productions. The Program is innovating ways to present information about both archaeological sites and TCPs to the public using all modes of available communications technology.

Curation of archaeological and ethnodata collections is a major element of the Program. The Program supports several state and tribal repositories and has invested in maintenance of Project collections storage and cataloging systems. The Program is also developing and
implementing viable and efficient systems for perpetuating digital data, beginning with contractual specifications that assure the integrity of digital data. BPA has been working with the other agencies to consolidate, validate and archive such data, especially the crucial geodata elements. The effort will be critical to success in developing the regional research design during the next two years of the Program.

**Summary**

In spite of many difficulties in development, the FCRPS Cultural Resource Program has been a signal success, and with careful management, should continue to help assure the region's legacy is protected and perpetuated.
REFERENCES CITED


U.S. Department of the Interior, Bureau of Reclamation


U.S. Government


Wernz, Maralee, Sally Bird, Steve Jenevein, Guy Prouty, and Shane Scot


Wernz, Maralee, Sally Bird, and Steve Jenevein

APPENDICES

APPENDIX A: List of Contributors
APPENDIX B: FCRPS Program Cooperating Groups and Participants
APPENDIX C: Bonneville Lock and Dam Additional Narrative Information
APPENDIX D: The Dalles Lock and Dam and Lake Celilo Project Additional Narrative Information
APPENDIX E: John Day Lock and Dam and Lake Umatilla Project Additional Narrative Information
APPENDIX F: McNary Lock and Dam and Lake Wallula Project Additional Narrative Information
APPENDIX G: Ice Harbor Lock and Dam and Lake Sacajawea Project Additional Narrative Information
APPENDIX H: Lower Monumental Lock and Dam and Lake West Project Additional Narrative Information
APPENDIX I: Little Goose Lock and Dam and Lake Bryant Project Additional Narrative Information
APPENDIX J: Lower Granite Lock and Dam and Lower Granite Lake Project Additional Narrative Information
APPENDIX K: Dworshak Dam and Reservoir Project Additional Narrative Information
APPENDIX L: Chief Joseph Dam and Rufus Woods Lake Project Additional Narrative Information
APPENDIX M: Albeni Falls Dam and Pend Orielle Lake Project Additional Narrative Information
APPENDIX N: Libby Dam and Lake Koocanusa Project Additional Narrative Information
APPENDIX O: Grand Coulee Dam and Lake Roosevelt Additional Narrative Information
APPENDIX P: Hungry Horse Dam and Lake
APPENDIX A
List of Contributors

Gail Celmer - U.S. Army Corps of Engineers, Northwestern Division, Regional Archaeologist and FCRPS Program Manager

Lynne MacDonald – Bureau of Reclamation, Pacific Northwest Regional Office

Elizabeth Ellis - Corps of Engineers, Seattle District, Libby Dam Project Manager

Sean Hess – Bureau of Reclamation, Grand Coulee Power Office

Michael Martin - Corps of Engineers, Portland District Office, Wana Pa Koot Koot Project Manager

Kristen Martine – FCRPS Cultural Resource Program Manager, Bonneville Power Administration

Alice Roberts - Corps of Engineers, Walla Walla District Office, Payos Kuus Cuukwe

Lawr Salo – Corps of Engineers, Seattle District Office, Albeni Falls and Chief Joseph Dam Project Manager
APPENDIX B
FCRPS Program Cooperating Groups and Participants

Wana Pa Koot Koot Cooperating Group
Bonneville, The Dalles, and the John Day Projects

- U.S. Army Corps of Engineers, Portland District
- Bonneville Power Administration
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Confederated Tribes of the Umatilla Indian Reservation
- Nez Perce Tribe
- Confederated Tribes and Bands of the Yakama Nation
- Columbia River Gorge National Scenic Area (U.S. Forest Service)
- Washington Department of Archaeology and Historic Preservation
- Oregon State Historic Preservation Office

Payos Kuus Cuukwe Cooperating Group
McNary, Ice Harbor, Little Goose, Lower Granite, Lower Monumental and Dworshak Dams

- U.S. Army Corps of Engineers, Walla Walla District
- Bonneville Power Administration
- Confederated Tribes of the Colville Reservation
- Confederated Tribes of the Umatilla Indian Reservation
- Nez Perce Tribe
- Confederated Tribes and Bands of the Yakama Nation
- Wanapum Band
- Idaho State Historical Society
- Oregon State Historic Preservation Office
- Washington Department of Archaeology and Historic Preservation

Chief Joseph Cooperating Group
Chief Joseph Dam

- Bonneville Power Administration
- Confederated Tribes of the Colville Reservation
- U.S. Army Corps of Engineers, Seattle District
- Washington Department of Archaeology and Historic Preservation

Lake Roosevelt Spokane Arm Cooperating Group
Grand Coulee Dam

- Bureau of Reclamation
- Bonneville Power Administration
- Spokane Tribe of Indians
- National Park Service, Lake Roosevelt National Recreation Area
- Washington Department of Archaeology and Historic Preservation
Lake Roosevelt Mainstem Cooperating Group  
Grand Coulee Dam

Bureau of Reclamation  
Bonneville Power Administration  
Confederated Tribes of the Colville Reservation  
National Park Service, Lake Roosevelt National Recreation Area  
Washington Department of Archaeology and Historic Preservation

Albeni Falls Cooperating Group  
Albeni Falls Dam

Bonneville Power Administration  
Coeur d’Alene Tribe  
Confederated Salish and Kootenai Tribes  
Idaho Panhandle National Forest  
Idaho State Historical Society  
Kalispel Tribe  
Kootenai Tribe of Idaho  
U.S. Army Corps of Engineers, Seattle District

Libby Cooperating Group  
Libby Dam

Bonneville Power Administration  
Confederated Salish and Kootenai Tribes  
Kootenai National Forest  
U.S. Army Corps of Engineers, Seattle District  
Montana State Historic Preservation Office

Hungry Horse Cooperating Group  
Hungry Horse Dam

Bureau of Reclamation  
Bonneville Power Administration’  
Flathead National Forest  
Confederated Salish and Kootenai Tribe  
Montana State Historic Preservation Office
APPENDIX C

Bonneville Lock and Dam Project
Additional Narrative Information

1. Project Description: The Bonneville Lock and Dam project is a run of the river project located between Columbia River Mile (CRM) 145 extending through CRM 192. Bonneville Dam was built as a Work Project Administration project, designed to promote development of the Columbia Basin, produce electricity, improve navigation on the Columbia River and provide jobs during the depression. The project was dedicated by Franklin Delano Roosevelt in 1937. In 1972 a second powerhouse was constructed on the north shoreline of Bonneville Dam, raising the pool by about 2 feet. Under current operations the pool fluctuates from 71.5 to 76.5 feet AMSL.

2. Cultural Resource Management: Highlights and history of cultural resource activities at the Bonneville Project extend back to the early 1930’s when members of the Smithsonian Institution conducted field studies on the islands that anchored Bonneville Dam. Details of studies conducted in preparation for the construction of Bonneville Dam and locks are not well understood. Field notes housed at the Smithsonian indicate that only minor work was undertaken, and make note of burials and house features. Other accounts of historic properties identified prior to 1966 are known through accounts from collectors, including newsletters published by amateur archaeological societies and a few reports and books.

With the passage of the National Historic Preservation Act of 1966 (NHPA), substantial areas of the Bonneville Pool were systematically surveyed prior to the construction of the second powerhouse.

Through the 1970s and 1980s the Portland District Cultural Resource staff oversaw efforts to document historic properties in preparation for construction of the second powerhouse at the Bonneville Project. Through contracts with private firms, the University of Washington, and in-house field investigations, Project funds were used to record and document a substantial number of historic properties, including 9 historic properties in the vicinity of the dam that were tested. Most of these sites are part of the North Bonneville Archaeological District. Two sites, remnants of the 1850’s military presence, became part of the historic district. Another site, 45SA11, was extensively excavated (data recovery) as the site was located in the forebay of the second powerhouse. Bonneville Lock and Dam was also nominated to the National Register of Historic Places as a National Historic Landmark as a result of investigations that occurred in the 1970s and 1980s.

This work was reported in management plans compiled and written by Portland District staff in the late 1980s. With the Joint Funding Agreement of the mid-1990’s, dependable funding became available and lead to a systematic inventory of the Bonneville Project. Inventory produced updated and new site records, along with fuller details about the cultural and historic background of the Project area. FCRPS-funded work from the mid-1990s through 2005 is reported in the historic property management plan for this Project (Wernz et.al. 2006).

Following the work for the second powerhouse, Congress enacted Treaty Fishing Site legislation to provide the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Reservation, and the Nez Perce Tribe (treaty tribes) with access to the Columbia River. While this work was not funded by the FCRPS, it was carried out as a consequence of the construction of the Bonneville Project and lead to the documentation and testing of historic properties. During this period the first detailed management plans identifying historic properties were written providing some guidance for site protection and management.
The FCRPS funded program, which began in 1997 and continues today, has permitted a systematic inventory of historic properties in the Bonneville Project; detailed background research; field surveys; inventory of Traditional Cultural Properties; a comprehensive and updated Historic Properties Management Plan; a monitoring program carried out on both the Oregon and Washington shores of the Project through 2006; and a contract for law enforcement with Columbia River Intertribal Fisheries Enforcement that providing river and road patrols and citation authority in support of ARPA compliance.


a. Project Areas: The Bonneville Project is unique in that much of its shoreline is in private ownership. The Government has flowage easements for areas above typical pool elevations. As a consequence, assessing affects of project operations on private property is incomplete and has only been undertaken along the shorelines, which were surveyed from a boat.

i. Project Area (or APE, if affirmed): The APE includes lands directly or indirectly affected by Project operations at present, or in the future where reasonably foreseeable (Wernz et.al 2006). For the Bonneville Project, Corps land owned in fee constitutes the Project area. APE discussions are being held in the Wanapa Koot Koot Cooperating work group.

ii. Project Real-Estate Based APE Mapped. Mapping and boundary monumentation is not consistent throughout the Project. Because Federal interest in the shoreline is primarily limited to flowage easements, permission to evaluate Project impacts requires coordination with land owners. As the number of owners is estimated to be over 100, this work has not been undertaken. Addressing boundary issues will require a detailed review of Tax Assessment data from county records in Washington and Oregon States. The Corps Portland District is currently working with BPA Geographic Information Systems staff to review some existing digitized real estate data in support of mapping Project lands, and eventually determining the APE.

b. Inventory Information
i. Archaeological Survey: Before FCRPS ca 1996, funded surveys were limited to particular areas, but survey intervals were not necessarily part of the record and may not be to current professional standards. Surveys were also generally related to the APE of particular Projects, as such they were not comprehensive and did not include all of the land held in fee.

FCRPS 1997-2009, survey intervals were defined in the scope of work and were carried out. Usually these intervals corresponded with the requirements of Washington and Oregon State Historic Preservation Offices.

ii. Archaeological Site Count
   Total Sites: The total number of sites documented before FCRPS Joint Funds were available is from the Bonneville Cultural Resources Management Plan prepared in the 1980s.

   Total Sites identified 1997-2009: This number was derived by subtracting the pre-FCRPS site numbers from FCRPS sites numbers found in the HPMP (Wernz et.al. 2006).

iii. Archaeological Site Evaluation Status
    Evaluation includes any technique used to assess significance of a site. For criterion d evaluations that assess information potential this can include test excavation, bank
scraping, minor feature recovery, radiocarbon dating from core samples, surface collection, and recording rock art.

**Sites before the FCRPS PROGRAM ca 1996.** These are referenced in a variety of documents. Those historic properties that compose the North Bonneville Archaeological District, and the Landmark status of Bonneville Lock and Dam and Hatcheries are identified on National Register forms. Sites tested before FCRPS Joint Funds (45SA5, 45SA11) typically were evaluated in terms of National Register criterion d, with testing results submitted to the appropriate SHPO for comment or concurrence. Most sites went through the eligibility determination process, but were not listed on the National Register of Historic Places. Listing sites gives location information which may lead to vandalism. Consequently, the final step in the nomination process is not pursued.

**Total Sites Evaluated during the FCRPS Joint-Funded Program ca 1997-2009.** Limited testing of sites generally is part of the determination process. However, most sites recently recorded were evaluated under lesser terms, such as “Appears Eligible”, meaning the environmental context documented during site discovery indicated buried cultural deposits were likely present or historical cultural information supported significance or the personal judgment of professional archaeologist suggest a sites significance.

**iv. National Register Status (Archaeological Sites, Historic sites, does not include TCPs.**

**NRHP Listed and/or Determined Eligible Sites (D)** National Register Forms were used to document these, as well as summary Tables in the HPMP.

**NR Districts. From Nomination forms pre FCRPS.** These sites include the North Bonneville Archaeological District and Bonneville Lock and Dam.

**Sites Determined Not Eligible or Non-contributing.** The evaluation process has not been generally extended in this manner. A few features, such as docks and pilings along the shoreline of the project, were old enough to be considered (at least 50 years old) under NR criteria but in the professional opinion of survey archaeologists been considered not eligible, but these are very few.

**Site Considered Eligible.** See comment under topic heading.

**Sites Considered Not Eligible.** See comment under topic heading.

**Unevaluated Sites.** No new sites have been discovered since the HPMP was finalized and all the sites reported in the HPMP were at least roughly assessed in the opinion of the field surveyors.

**v. TCP Studies Status (Interim; all Management Phases)**

**TCP Studies before FCRPS Program (<ca 1996).** No TCP studies were carried out prior to FCRPS Direct Funding.

**TCP Studies Under FCRPS 1997-2009.** With FCRPS funding TCP studies were initiated.

**d. SITE TREATMENT OR MITIGATION.**

**i. Before FCRPS Program < ca 1996**

Stabilized Very little stabilization of sites occurred in the Bonneville Project. Most preservation work involved signage and patrolling of site areas.

**Data Recovery.** During the construction of the Second Powerhouse, ca. 1970’s, 45SA11, a native village, was subjected to data recovery.
Visitor Center Displays. Bonneville Lock and Dam Project includes a visitor Center with a display briefly discussing Prehistory and History of the Dam.

ii. FCRPS Program 1997-2009

Sites Stabilized: Memaloose Island, an attempt was made to stabilize this traditional burial place and cultural deposits on Memaloose.

Data Recovery. No data recovery efforts have been undertaken with FCRPS funds.

Visitor Center Displays. No displays have been funded by FCRPS funds.

Brochures. FCRPS funds have been used to prepare a cultural site protection brochure. Brochures are available in the project office, from Ranger staff and CRITFE Law enforcement staff.

CDs/DVDs/VCR. All reports, HPMP, Monitoring Reports, and some site documentation have been placed on digital medium, some field work is documented on a VCR format.

Book. No FCRPS funds have been used to prepare a book for general public use.

Volunteer Projects. No FCRPS funds have been used to support volunteer efforts.

e. CURATION. The Portland District curates materials from the Bonneville Project at the University of Washington Burke Museum and the Yakama Nations Cultural Heritage Museum. Collection volumes taken from the yearly National Park Services Questionnaire and COE records.

University of Washington Burke Museum
Yakama Heritage Center

Temporary Repositories with Curation Agreements. None

Temporary Repositories or Permanent Repositories without Curation Agreements. None

4. Notable Achievements During Reporting Period. The intensive survey of the shoreline of the Project was important as it established a baseline of site data and location information that was incomplete prior to this effort. The law enforcement effort was also critical at the Bonneville Project, and has probably discouraged collecting.

5. Graphics.

6. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

a. FCRPS

Bird, Sally and Steve Jenevein
2003 2002 Cultural Resource Monitoring on the Bonneville Lock and Dam Project, South Side. Department of Cultural Resources, Confederated Tribes of the Warm Springs Reservation of


2002 Cultural Resource Monitoring On the Bonneville Lock and Dam Project: South Side Bird, Sally , Steve Jenevein, and M. Wernz


Bird, Sally, Maralee Wenz and Steve Jenevein


Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers


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APPENDIX D
The Dalles Lock and Dam Project
Additional Narrative Information

1. Project Description: The Dalles Lock and Dam, a run of the river dam is located at Columbia River Mile (CRM) 192 and extends upstream through CRM 216. The Dalles Dam was authorized in 1950 and construction started in 1952 and the structure was completed in 1957. The dam provides hydroelectric power, improved navigation, irrigation and recreational benefits.

2. Cultural Resource Management: Highlights of cultural resource activities at The Dalles Project extend back into the 1930’s when a Smithsonian team look at a number of large complex sites in this reach of the river. These included Miller Island, Big Eddy, Five Miles Rapids, Wakemap Mound and the Deschutes River. During the construction of The Dalles Lock and Dam the National Park Service and the Smithsonian lead and contracted efforts to evaluate sites that would be impacted by construction and subsequent inundation. Collectors were also excavating sites for artifacts through the mid-1960s.

With the National Historic Preservation Act the Corps developed in-house capabilities which lead to more intensive field investigations structured by scopes of work. A number of contracts inventoried important places such as Horsethief Lake, the John Day River arm of The Dalles Pool and Bob’s Point. While many sites were known, the project area fee lands were not completely surveyed.

With FCRPS funding both sides of the project were surveyed and a HPMP prepared for the project. Highlights of this period include yearly 2003-2009 shoreline monitoring; a law enforcement contract with the Columbia River Intertribal Fish Enforcement section for river and shoreline patrols; testing at Seufet Cannery site to determine the type and extent of cultural resources; placement of petroglyphs taken from the inundated areas of The Dalles project during the 1950s at Horsethief Lake; an intensive effort to document the oral history and TCP values of Celilo Falls area; and a more general TCP study within the project.

3. Notes on the Data: Data for the tables in the annual report derive from several sources. The following review provides information on the source of data, their status and reliability. Data on The Dalles Project comes from the 2006 Historic Preservation Management Plan, the 1980’s The Dalles Cultural Resource Management Plan and other documents as cited.

a. Project Areas: The Dalles Project is well monumented, however, it is difficult to find the monuments in the field and more visible boundary markers are necessary. Enforcement of cultural resource laws, no collecting, is much easier if Federal lands are well marked.

i. Project Area (or APE, if Affirmed): The APE includes lands directly or indirectly affected by project operations at present or in the future where reasonably foreseeable. For this project CoE land owned in fee constitutes the project area. APE discussions are being held in the Wanapa Koot Koot Cooperating work group.

ii. Project Real-Estate Based APE Mapped: Boundary monumentation is present in the field, but difficult to locate. Real Estate maps are available from the Portland District, but these are very small scale maps and are difficult and costly to compile for the whole District. Boundary maps are on the District’s GIS server, however, certain private property boundaries may not be included, but these are thought to be few in number; the maps are generally valid.

b. Inventory Information.
i. Archaeological Survey

Before FCRPS ca 1996: Funded surveys were limited to particular areas, but survey intervals were not necessarily part of the record, although survey intervals were specified in Scopes of Work. Surveys were also generally related to the APE of particular projects, as such they were not comprehensive and did not include all of the land held in fee. Some areas, the John Day River, The Dalles Project site upstream past Horsethief Lake Park were surveyed, but a comprehensive survey of the whole project was not funded and therefore not undertaken. To determine how much land was actually surveyed will require a more intensive effort, reviewing all of the scopes of work and products produced prior to FCRPS direct funding agreement.

FCRPS 1997-2009: Survey intervals were defined in the scope of work and were carried out. Usually these intervals corresponded with the requirements of various SHPOs.

ii. Archaeological Site Count

Total Sites before FCRPS were taken from The Dalles Cultural Resources Management Plan prepared in the 1980s and compared to those recorded in the HPMP.

Total Sites identified 1997-2009: Subtracting the pre-FCRPs site numbers from FCRPs period site numbers found in the HPMP.

iii. Archaeological Site Evaluation Status

Evaluation includes any technique used to assess significance of a site under Criterion D; test excavation, bank scraping, minor feature recovery, radiocarbon dating from core samples, surface collection and recording of rock art are all included as evaluation actions.

Sites before FCRPS PROGRAM ca 1996. These are referenced in a variety of documents. Those historic properties that compose the North Bonneville Archaeological District, and the Landmark status of Bonneville Lock and Dam and Hatcheries are identified on National Register forms. Sites tested before FCRPS funding typically were evaluated in terms of National Register criteria D with testing results submitted to the appropriate SHPO for comment or concurrence. Most sites went through the determination process, determined eligible but were not formally listed on the National Register of Historic Places. Listing sites gives locational information which may lead to vandalism, consequently the final step in the nomination process is not pursued.

Total Sites Evaluated during the FCRPS PROGRAM ca 1997-2009. Limited testing of sites is generally part of the determination process. However, most sites recently recorded were evaluated under lesser terms, such as Appears Eligible, meaning the environmental context documented during site discovery indicated buried cultural deposits are likely present or historical cultural information supported the significance of a place or the personal judgment of professional archaeologist suggest a sites significance. Under FCRPS the Seufert Cannery area was evaluated and buried cultural deposits are present. No other testing has been done.

iv. National Register Status (Archaeological Sites, Historic sites, does not include TCPs).

NRHP Listed and/or Determined Eligible Sites (D) Roadcut Site, listed in 1974. Bob's Point Site area was tested in 1986, and though the area was extensively vandalized deep cultural deposits are present. The Celilo Park (related to the Celilo Falls Fishing) area was tested in 1998 and determined eligible for listing on the National Register, this work was done as part of the Treaty Fishing Site projects and was not supported with FCRPS funds.

NR Districts. From Nomination forms pre-FCRPS. Wishram Village National Register District.
Sites Determined Not Eligible or Non-contributing.

Site Considered Eligible. The category, Potentially Eligible, is used indicating that presence of prehistoric material is sufficient to meet SHPO definition of a site, but the area has not been tested. We have included these sites in this count.

Sites Considered Not Eligible. A number of lithic concentrations and isolates were considered Ineligible per remarks in HPMP summary table. (Isolates are generally considered not sites, although without testing or environmental context information single artifacts may indicate buried cultural deposits.)

Unevaluated Sites. No new sites have been discovered since the HPMP was finalized and all the sites reported in the HPMP were at least roughly assessed in the opinion of the field surveyors. However, I think the argument should be made that any sites untested are only provisionally evaluated and should be evaluated by testing. This would be 51 new sites found by either the Warm Springs or the Yakama, I did not include this number in the spreadsheet because the category asks for only those site that are unevaluated—and all those listed in the HPMP Table 1 have a provisional evaluation.

v. TCP Studies Status (Interim; all Management Phases)
TCP Studies before FCRPS Program (<ca 1996). No TCP studies were carried out prior to FCRPS Direct Funding.
TCP Studies Under FCRPS 1997-2009. With FCRPS funding TCP studies were initiated, including the Celilo Fishery and other areas along the north shore of the project.

d. Site Treatment or Mitigation.

i. Before FCRPS Program < ca 1996
Stabilized No site stabilization occurred in The Dalles Project. Most preservation work involved signage and patrolling of site areas.

Data Recovery. No data recovery has occurred in The Dalles Project.

Visitor Center Displays. The Seufert Visitor Center at The Dalles Dam includes a visitor Center with a display briefly discussing Prehistory and History of the Dam.

ii. FCRPS Program 1997-2009
Sites Stabilized: Memaloose Island, an attempt was made to stabilize this traditional burial place and cultural deposits on Memaloose in 2004.

Data Recovery. No data recovery efforts have been undertaken with FCRPS funds.

Visitor Center Displays. No displays have been funded by FCRPS funds.

Brochures. FCRPS funds have been used to prepare a cultural site protection brochure. Brochures are available in the project office, from Ranger staff and CRITFE Law enforcement staff.

CDs/DVDs/VCR. All of our reports, HPMP, Monitoring Reports, and some site field documentation have been placed on digital medium, some field work is documented on a VCR format.

Book. No FCRPS funds have been used to prepare a book for general public use.

Volunteer Projects. No FCRPS funds have been used to support volunteer efforts.

e. Curation.
Artifacts (cu. ft.) The Portland District does not have any pre-FCRPS curation obligations. Cultural material removed during National Park Service Investigations was donated to Museums and is not paid for by the Corps. The Smithsonian also has collections from Portland District lands.

Records (linear feet) See note above, Artifacts.

Permanent Repositories with Curation Agreements
Most of the construction period work involved the National Park Service and the Smithsonian. Collections from this period were donated to the University of Washington and University of Oregon. These collections have no Federal tie as far as payment for curation.

Temporary Repositories with Curation Agreements. None

Temporary Repositories or Permanent Repositories without Curation Agreements. None

4. Notable Achievements During Reporting Period.
The intensive survey of the shoreline of the project was important as it established a baseline of site data and locational information that was incomplete prior to this effort. Moving petroglyphs from storage at The Dalles Dam, these were recovered in the 1950s, to Horsethief Lake is a notable accomplishment. The petroglyphs are now protected and on display. Also the site protection measures at 45KL749 (Windsurfer Site) and 45KL219 (Bobs Point) involving placement of fill and revegetation to secure areas of these sites impacted by visitors and looters.

5. Graphics.

6. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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APPENDIX E
John Day Lock and Dam Project
Additional Narrative Information

1. **Project Description:** The John Day Lock and Dam, a run of the river structure although it does have limited storage capacity to aide in flood control. The pool is operated between 262 and 265 feet MSL; the project has a flood storage capacity that extends to 268 feet MSL. The structure is located at Columbia River Mile (CRM) Construction was authorized in 1958, and completed in 1968. The project’s authorization includes hydroelectric power, navigation, recreation, flood control and irrigation.

2. **Cultural Resource Management:** Highlights of cultural resource activities at the John Day Project extend back into the 1930’s when a Smithsonian team looked at and described a number of large complex sites within this reach of the river. During the 1950-1960 collectors excavated sites for artifact collections and in few cases described their efforts and what they recovered. Descriptive information was provided in a few books and in publications by the Mid-Columbia Archaeological Society. During the construction of the John Day Dam the Park Service funded archaeological field investigations by field crews from the University of Oregon. Documents produced by this work include brief site excavation reports. (The organization of this work may have been quite informal with professional archaeologists engaged to test sites in a manner they thought appropriate, rather than following a written negotiated scope of work.

Old Town Umatilla a site with prehistoric and historic components is an important traditional and archaeological resource at the upper end of the John Day Project. This site was tested a number of times by the University of Idaho using a field crew recruited from the Mid-Archaeological Society members. Short reports were prepared from this work and an extensive collection of field maps and notes are currently curated by Tamaslklit, a facility operated by the Confederated Tribes of the Umatilla Reservation. This work lead to an additional study which appraised the early effort, added additional information and prepared a National Register Nomination (District) for the site.

In the 1990’s a management plan was prepared by Portland District Cultural Resource staff. The baseline for this work included collection and updating of all know site records and a field check of these locations by a field crew from the University of Oregon.

The FCRPS funded program, 1996-2009, has provided a systematic inventory of historic properties in the Bonneville project including detailed background research and a field survey of the whole project area; a comprehensive and updated Historic Properties Management Plan, Miima Taymut: A Historic Properties Management Plan for the John Day Reservoir (John Day HPMP); a monitoring program carried out up through 2006; and a contract for law enforcement with the Columbia River Intertribal Fish Enforcement providing river and road patrols and citation authority; and the initiation of an inventory for Traditional Cultural Properties.

3. **Notes on the Data.** Data for the tables in the annual report derive from several sources. The following review provides information on the source of data, their status and reliability. Data on the John Day Project comes from the 2006 Historic Preservation Management Plan, and other documents as cited.

   a. **Project Areas.** The John Day Project is monumented, however, it is difficult to find the monuments in the field and more visible boundary markers are necessary.

      i. **Project Area (or APE, if Affirmed).** The APE includes lands directly or indirectly affected by project operations at present or in the future where reasonably foreseeable. For this project CoE land owned in fee constitutes the project area. APE discussions are being held
in the Wanapa Koot Koot Cooperating work group to determine if the APE needs to be broader.

ii. Project Real-Estate Based APE Mapped. Real Estate maps are available from the Portland District and are on the District’s GIS server. However, certain private property boundaries are not well marked in the field. In addition, some land transfers are not completed through their full transaction. Consequently, while Federal property can be defined, in fact some land is still in non-Federal hands.

b. Inventory Information.
   i. Archaeological Survey
      Before FCRPS ca 1996: Funded surveys were limited to particular areas, but survey intervals were not necessarily part of the record, although survey intervals were specified in Scopes of Work. Surveys were also generally related to the APE of particular projects, as such they were not comprehensive and did not include all of the land held in fee. Some areas, such as the John Day River, however, were intensively surveyed.

      FCRPS 1997-2009: Survey intervals were defined in the scope of work and were used during the inventory of the John Day Project. These intervals meet the current requirements for an intensive survey.

   ii. Archaeology Site Count
      Total Sites identified 1997-2009: Subtracting the pre-FCRPs site numbers from FCRPs period site numbers found in the HPMP.

   iii. Archaeological Site Evaluation Status
      Evaluation includes any technique used to assess significance of a site under Criterion D; test excavation, bank scraping, minor feature recovery, radiocarbon dating from core samples, surface collection and recording of rock art are all included as evaluation actions.

      Sites before FCRPS PROGRAM ca 1996. These are referenced in a variety of documents. In the late 1980s a Cultural Resource Management Plan for the John Day Project was prepared by Portland District Cultural Resource Staff; site forms for these sites were collected, revisited and updated in the management plan. Sites tested before FCRPS funding typically were evaluated in terms of National Register criteria D with testing results submitted to the appropriate SHPO for comment or concurrence. Most sites went through the determination process, determined eligible but were not formally listed on the National Register of Historic Places. Listing sites gives locational information which may lead to vandalism, consequently the final step in the nomination process is not pursued.

      Sites Evaluated ca 1997-2009. Limited testing of sites is generally part of the determination process. The John Day HPMP lists a few of the sites found pre-FCRPS, as Listed on the National Register and a group not eligible for listing but the method of determination is not clear and must be reviewed.

      Unevaluated Sites. While this cell provides an estimate of unevaluated sites previous determinations should be reviewed to assure that the meet current requirements.

   iv.) National Register Status (Archaeological Sites, Historic sites, does not include TCPs).
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NR Districts. From Nomination forms pre-FCRPS. Wishram Village National Register District.

Sites Determined Not Eligible or Non-contributing. The John Day HPMP lists a group of sites whose non-eligibility has been defined by formal and informal determinations. I include the count of both of this for this category.

Site Considered Eligible. A table listing informally eligible sites is included in the John Day HPMP. A table for unevaluated sites, 'no determination made' is also included. We have included these sites in this count, assuming sites are eligible until determined otherwise.

Sites Considered Not Eligible. The John Day HPMP was used as the source of information for sites not considered eligible. The list of these sites also considers whether the finding is based on formal or informal methods. I have included both informal and formal determinations of non-site eligibility.

Unevaluated Sites. A substantial number of new sites have been reported. Some of these sites were located during the FCRPS funded inventory of the John Day Project, the final report and site records are being prepared but this study is not yet completed. A few sites were found prior to FCRPS funding, they may go back to the 1950s work in the project. It may be prudent to test sites that have informally been determined eligible but have not be tested.

v. TCP Studies Status (Interim; all Management Phases):
TCP Studies before FCRPS Program (<ca 1996). No TCP studies were carried out prior to FCRPS Direct Funding.

TCP Studies Under FCRPS 1997-2009. The Confederated Tribes of the Umatilla Indian Reservation produced an early document that identified TCPs throughout the three reservoirs. This document identified TCP’s within a broad areas requiring additional consultation for actual locations. In 2007 TCP studies were initiated and the Yakama Nation started documenting these, and the Confederated Tribes of the Umatilla continued adding to their early efforts.

d. Site Treatment or Mitigation.
i. Before FCRPS Program < ca 1996:
   Sites Stabilized. Bank protection was applied to the shoreline of Old Town Umatilla to stop bank erosion and to prevent collecting. Most preservation work involved signage and patrolling of site areas.

   Data Recovery. Extensive excavations occurred at Old Town Umatilla, pre-FCRPS.

   Visitor Center Displays. No visitor displays for the John Day Project. Tamasklit Cultural Center does have exhibits that use material recovered from Old Town Umatilla Sites.

ii. FCRPS Program 1997-2009
   Sites Stabilized: No additional stabilization has occurred in the John Day Project using FCRPS funds. However, I counted three years of vegetation control in Old Town Umatilla as a stabilization effort.

   Data Recovery. No data recovery efforts have been undertaken with FCRPS funds.

   Visitor Center Displays. No displays have been funded by FCRPS funds.
Brochures. FCRPS funds have been used to prepare a cultural site protection brochure. Brochures are available in the project office, from Ranger staff and CRITFE Law enforcement staff.

CDs/DVDs/VCR. All of our reports, HPMP, Monitoring Reports, and some site field documentation have been placed on digital medium, some field work is documented on a VCR format.

Book. No FCRPS funds have been used to prepare a book for general public use.

Volunteer Projects. No FCRPS funds have been used to support volunteer efforts.

e. Curation.
The Portland District and the Confederated Tribes of the Umatilla Indian Reservation have a Co-operative agreement to curate collections taken from Old Town Umatilla.

Artifacts (cubic feet): The number of cubic feet is based on contract specification.
Records, (linear Feet): The number of linear feet is base on contract specifications.

Permanent Repositories with Curation Agreements:
Tamasklit Curation (Figures taken from National Park Services yearly questionnaire.
Temporary Repositories with Curation Agreements. None.
Temporary Repositories or Permanent Repositories without Curation Agreements.
None

4. Notable Achievements During Reporting Period. The intensive survey of the shoreline of the project is important as it established a baseline of site data and locational information that was incomplete prior to this effort. The law enforcement effort was also critical in the John Day Project. A number of individuals have been cited by Columbia River Intertribal Enforcement at Old Town and the reduction in vegetation has contributed enabling Officers and Umatilla Tribal Staff to observe looters and has probably discouraged others from collecting.

5. Graphics.

6. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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APPENDIX F

McNary Lock and Dam and Lake Wallula Project
Additional Narrative Information

1. Project Description. The McNary Lock and Dam and Lake Wallula Project (Project) is a large concrete, gravity dam and hydroelectric power plant on the mid Columbia River just upstream from the mouth of the Umatilla River, and one mile east of the town of Umatilla, Oregon, at river mile 292. The project was approved in 1941, and construction was initiated in 1947. The project was completed in 1954, and all power units were in operation in February 1957. The lock and dam provide for navigation, hydroelectric power generation, recreation, wildlife habitat, and incidental irrigation.

Lake Wallula is formed behind McNary Dam, and extends 61 miles upstream to the U.S. Department of Energy's Hanford Site (about 27 miles above Pasco, Washington). The lake also extends up the Snake River to Ice Harbor Lock and Dam. Lake Wallula has a water surface area of 37,000 acres, with 242 miles of shore line. The lake has a normal operating range between 335-340’ above mean sea level. The project has over 17,000 acres of fee title lands above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management for the Project began in the late 1940s as part of the Smithsonian Institution's River Basin Surveys program. The surveys identified 120 sites, 22 of which were recommended for priority excavation. Between the late 1940s-1970s, numerous significant sites threatened by inundation/affected by Project activities were subject to excavation including: Cold Springs Site (35UM7); Hat Creek (35UM5); Berrian’s Island (45BN3); 45BN6; Rabbit Island (45BN15); 45BN23; 45BN53, an extensive village site; Sheep Island Site (45BN55); Batman Island/Columbia Park (45BN161); High Island Sit (45BN186); Strawberry Island (45FR5); and the Wallula Site (45WW6).

In 1976, a post-impoundment reconnaissance survey was conducted under Corps contract for the Project with the intent to resurvey and evaluate previously recorded sites, and to identify additional sites. The survey found that many recorded sites had been inundated or disturbed to some extent. Test excavations in the 1970s-80s were undertaken at: 35UM64; Two Rivers Park Site (45BN14); 45BN23; 45BN52; Martindale Island (45BN283); Ainsworth Site (45FR2); Taylor Flat (45FR251); and 45FR317.

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 127 archaeological sites within McNary Project lands. Estimated survey coverage prior to FCRPS program initiation was 926 acres (calculation based on GIS data digitized from prior technical reports/publications and associated survey maps).

3. FCRPS Cultural Resource Management at the Project. Funding for the McNary Project began in 1997 under the FCRPS Cultural Resources Management Program. Since that date, several FCRPS-funded projects have been completed including preparation of planning documents, inventory survey, archaeological site evaluation, monitoring, erosion assessment, stabilization work, collections assessments, and a law enforcement and public awareness program. A task order for the identification of traditional cultural properties is ongoing.

**Management Plans:** A CRMP was developed for the McNary Project in 2000. Per the P.A., the project data will be updated and presented in an Historic Properties Management Plan (HPMP) format.
a. **Inventory Survey:** Approximately 780 acres have been surveyed since 1997, facilitating the assessment of previously recorded sites and the identification of additional sites. To date, inventory survey has identified an additional 179 sites, bringing the total for the Project to 306 (160 of these are partially inundated, and 40 are totally inundated). Additional inventory survey in the uplands adjacent to the project is proposed for FY10-11.

b. **Archaeological Site Evaluation:** Two studies focusing on evaluation of sites for NRHP eligibility have been conducted since 1997, which, through test excavations, evaluated 39 sites within the Project. NRHP eligibility determinations to date are: one National Register of Historic Places (NRHP) listed site; five NRHP listed districts; three sites determined eligible for NRHP listing; 35 recommended potentially eligible; and five sites determined not eligible.

c. **Monitoring and Erosion Assessment:** A monitoring program for all District Projects was developed in 2003. A continued program of monitoring occurs on various schedules depending on the type of resource and imminent threats to the integrity of the site. A total of 55 sites were monitored under the District-wide program in FY08. Also in FY08, the McNary Reservoir 5-year monitoring study was completed.

d. **Stabilization:** Under the program, bank protection programs have been instituted at sites within the Project including: Martindale Island, Columbia Park, Strawberry Island, and Cottonwood Cove.

e. **Public Awareness and Law Enforcement Program:** In 2004, a cultural resources law enforcement and public awareness coordination program was developed and implemented for the McNary, Ice Harbor, and Lower Monumental Projects.

f. **Collections Assessment:** Collections assessments for most of the sites within the Project have been completed. More specific numbers will be included in the FY11 FCRPS Annual Report.

g. **Traditional Cultural Properties (TCP):** Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by the Washington Department of Archaeology and Historic Preservation and BPA. Summaries of pre-FCRPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. **Bibliography.** The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present day. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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Cook, J.M.  

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Haug, S.W.
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Johnson, P.

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Keith, M.E.


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Western Heritage, Inc.
APPENDIX G
Ice Harbor Lock and Dam and Lake Sacajawea Project
Additional Narrative Information

1. Project Description. The Ice Harbor Lock and Dam and Lake Sacajawea Project (Project) is a large concrete, gravity dam and hydroelectric power plant on the Snake River in Walla Walla and Franklin Counties, Washington. The dam is located 12 miles east of Pasco, Washington at river mile 9.7. Construction began on the Project in 1955. The main structure and three generators were completed in 1961, with an additional three generators finished in 1976.

Lake Sacajawea behind the Ice Harbor Project extends 32 miles upstream to the Lower Monumental Dam and has a water surface area of 8,375 acres with a normal operating range between 437-440’ above mean sea level. The project has approximately 7,830 acres of fee title lands above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management at the Project began in the late 1940s as part of the Smithsonian Institution’s River Basin Surveys program; and in the 1950s by researchers from WSU. The level of survey coverage is unclear; however, data indicate that it provided a very limited sample of the total study area; and that none of the islands within the Project were surveyed. The early surveys identified 25 sites within the Project. Subsequently, a number of sites threatened by inundation were subject to excavation by academic archaeologists associated with both WSU and UW, as well as avocational archaeologists. Most of the excavations focused on village and burial sites, most notably the Harder Site (45FR40), the Votaw Site (45FR32), Fishhook Island (45FR42); Windust Caves Site (45FR46), and Ford Island (45FR47), as well as a number of other burial sites. Most of the burials recovered from these sites were reinterred in the 1970s and early 1990s.

In 1975, a post-impoundment reconnaissance survey was conducted that identified at least three sites and one archaeological complex; most previously recorded sites were also revisited. Several sites were subsequently subject to test excavations: Burr Cave (45FR272); Ash Cave (45WW61; and Windust Cave (45FR46, additional excavations). The LeRoy Allen Rockshelter (45FR273), recorded through the 1975 survey, is NRHP listed.

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 33 archaeological sites within the Project. Estimated survey coverage for the Project prior to FCRPS program initiation was 360 acres; (calculation based on GIS data). Survey coverage does not appear to have been consistent throughout the project study area, and the adequacy of survey methods is under evaluation.

3. FCRPS Cultural Resource Management at the Project. Funding for the Ice Harbor Project began in 1997 under the FCRPS Cultural Resources Management Program. Since that date, several FCRPS-funded projects have been completed including preparation of planning documents, inventory survey, archaeological site evaluation, monitoring, erosion assessment, stabilization work, collections assessments, and a law enforcement and public awareness program. A task order for the identification of traditional cultural properties is ongoing.

Per the P.A., an updated HPMP is currently in preparation and should be completed by the end of FY10.

b. Inventory Survey: Approximately 4,850 acres have been surveyed since 1997, facilitating the assessment of previously recorded sites and the identification of additional sites. To date, inventory survey has identified an additional 34 sites, bringing the total for the Project to 67
(35 of these are partially or completely inundated). Survey gaps for the Ice Harbor Project will be the subject of a FY10 workshop.

c. Archaeological Site Evaluation: Test excavations were conducted at seven sites to assess NRHP eligibility (45FR43, 45FR45, 45FR471, 45FR472, 45WW14, 45WW20, 45WW115). Three of the sites were recommended eligible for the NRHP: 45FR471, 45WW14, and 45WW115. The remaining four sites were recommended not eligible. NRHP eligibility determinations to date are: one NRHP listed site; one NRHP listed district; three sites determined eligible for NRHP listing; and six recommended potentially eligible. A re-evaluation of sites formerly recommended as not eligible will be initiated in FY10.

d. Monitoring and Erosion Assessment: Monitoring of sites in the Project began in 1999. A formal monitoring program for all District Projects was developed in 2003. A continued program of monitoring occurs on various schedules depending on the type of resource and imminent threats to the integrity of the site. A total of 55 sites were monitored under the District-wide program in FY08.

f. Stabilization: No sites within the Ice Harbor Project have been stabilized under FCRPS.

Public Awareness and Law Enforcement Program: In 2004, a cultural resources law enforcement and public awareness coordination program was developed and implemented for the McNary, Ice Harbor, and Lower Monumental Projects.

g. Collections Assessment: Collections assessments for most of the sites within the Project have been completed. More specific numbers will be included in the FY11 FCRPS Annual Report.

h. Traditional Cultural Properties (TCP): Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by the Washington Department of Archaeology and Historic Preservation. Summaries of pre-FRCPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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Tracy, R.

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Andrefsky, W. Jr.

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APPENDIX H
Lower Monumental Lock and Dam and Lake West Project
Additional Narrative Information

1. Project Description. The Lower Monumental Lock and Dam and Lake West Project (Project) is a large concrete, gravity dam and hydroelectric power plant on the Snake River in Walla Walla and Franklin Counties, Washington. The dam is located 6 miles south of the town of Kahlotus, Washington at river mile 41.6. Construction began on the Project began in 1961, the main structure and three generators were completed in 1969, and an additional three generators finished in 1981.

Lake West behind the Lower Monumental Dam extends 28 miles upstream to the Little Goose Lock and Dam Project and has a water surface area of 6,590 acres between 537-540’ above mean sea level. The project has approximately 7,500 acres of fee title lands and 1,300 acres of easement land above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management at the Project began in the late 1940s as part of the Smithsonian Institution's River Basin Surveys program; and in the 1950s by researchers from WSU. The level of survey coverage survey is unclear; however, data indicate that it provided a very limited sample of the total study area. Approximately 32 archaeological sites were identified through these surveys.

Subsequently, a number of significant sites threatened by inundation were subject to excavation, including: Palouse Village Site (45FR36) and associated burial sites (46FR36b, 45WT2, 45WT56); Three Springs Bar Site (45FR39); Harder Site (45FR40); Marmes Rockshelter (45FR50); Storage Site (45FR60); McGregor Rockshelter (45FR201); Porcupine Cave (45FR202); Riparia Site (45WT1); and the Trestle Site (45WT2).

In 1976, a post-impoundment reconnaissance survey was conducted that assessed the majority of previously recorded sites and identified an additional 13 sites. Survey methods and coverage were not consistent throughout the project study area; and the adequacy of survey methods is under evaluation. Sites subsequently excavated include: 45FR36C; Lyon’s Ferry Fish Hatchery (45FR51); Mesa Burial Site (45FR52); 45FR53-54; Porcupine Cave (45FR202, additional excavations); 45FR272; 45FR275-45FR279; Riparia Site (45WT1, additional excavations)

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 35 archaeological sites within the Project (the discrepancy with data enumerated above will be investigated (i.e. 45 sites identified prior to SOR-FEIS). Estimated survey coverage for the Project prior to FCRPS program initiation was <10 acres (calculation based on GIS data). These data are currently being reviewed for accuracy, as the rich archaeological data for the Palouse River valley and pre-FCRPS site evaluations suggest greater survey coverage.

3. FCRPS Cultural Resource Management at the Project. Funding for the Lower Monumental Project began in 1997 under the FCRPS Cultural Resources Management Program. Since that date, several FCRPS-funded projects have been completed including preparation of planning documents, inventory survey, archaeological site evaluation, monitoring, collections assessments, and traditional cultural property identification, which is ongoing.

a. Management Plans: A CRMP was prepared for the Lower Snake River Projects in 2000. Per the P.A., an updated HPMP will be initiated in FY11.
b. Inventory Survey: Approximately 9,570 acres have been surveyed since 1997, facilitating the assessment of previously recorded sites and the identification of additional sites. To date, inventory survey has identified an additional 172 sites, bringing the total for the Project to 207 (29 of these are partially or completely inundated). Any survey gaps for the Lower Monumental Project will be the subject of a FY10 workshop.

c. Archaeological Site Evaluation: A study focusing on evaluation of sites for NRHP eligibility was conducted in 2002 and involved excavations at 28 sites within Project lands. Eight of the tested sites were recommended NRHP eligible. NRHP eligibility determinations to date are: one NRHP listed site; one NRHP listed district; ten sites determined eligible for NRHP listing; and ten recommended potentially eligible. A re-evaluation of sites formerly recommended as not eligible will be initiated in FY10.

d. Monitoring and Erosion Assessment: Monitoring of sites in the Project began in 1999. A formal monitoring program for all District Projects was developed in 2003. A continued program of monitoring occurs on various schedules depending on the type of resource and imminent threats to the integrity of the site. A total of 55 sites were monitored under the District-wide program in FY08.

e. Stabilization: No sites within the Lower Monumental Project have been stabilized under FCRPS.

f. Public Awareness and Law Enforcement Program: In 2004, a cultural resources law enforcement and public awareness coordination program was developed and implemented for the McNary, Ice Harbor, and Lower Monumental Projects.

g. Collections Assessment: Collections assessments for most of the sites within the Project have been completed. More specific numbers will be included in the FY11 FCRPS Annual Report.

h. Traditional Cultural Properties (TCP): Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by the Washington Department of Archaeology and Historic Preservation. Summaries of pre-FCRPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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Bonneville Power Administration, Bureau of Reclamation, and U.S. Army Corps of Engineers


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Colville Confederated Tribes, History/Archaeology Program


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Western Heritage, Inc.

APPENDIX I
Little Goose Lock and Dam and Lake Bryant Project
Additional Narrative Information

1. Project Description. The Little Goose Lock and Dam and Lake Bryant Project (Project) is a large concrete, gravity dam and hydroelectric power plant on the Snake River in Columbia and Franklin Counties, Washington. The dam is located 9 miles northeast of the town of Starbuck, Washington at river mile 70.3. Construction began in 1963. The main structure and three generators were completed in 1970, with an additional three generators finished in 1978.

Lake Bryant, behind the Little Goose Dam, extends 37 miles upstream to Lower Granite Lock and Dam. The pool has a water surface area of 10,025 acres with normal pool levels 633-638’ above mean sea level, and the shoreline measures 92 miles. The project has approximately 11,200 acres of fee title lands and 255 acres of easement land above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management at the Project began with survey in the late 1940s as part of the Smithsonian Institution's River Basin Surveys program; and in the 1960s by researchers from WSU. The level of survey coverage is unclear; however, data indicate that it provided a very limited sample of the total study area. Approximately 73 archaeological sites were identified through these surveys. Subsequently, a number of significant sites threatened by inundation were subject to excavation including: New York Bar Site (45GA1); 45GA3; 45GA4; 45GA5; 45GA7; Steelman Site (12GA12); 45GA10; 45GA11; River Road Forks Site (45GA17); 45GA20; Illia Bar (45GA26); 45GA29; 45WT11; 45WT32; Lower Monumental Dam Site (45WT35); 45WT48; 45CO4; 45CO11; and 45CO14.

In 1976, a post-impoundment reconnaissance survey was conducted that assessed the majority of previously recorded sites and identified at least three additional sites. Several sites were subsequently subject to test excavations. Subsequent excavations were conducted at: Willow/Hastings Bar Burial (45GA2); Rice Bar Site (45GA18), to recover human remains exposed through erosion (reinterred in 1983); 45WT10; 45WT30; and 45WT31. A WSU field school conducted additional excavations at Illia Bar (45GA26) in 1993.

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 76 archaeological sites within the Project. Survey coverage data for the Project prior to FCRPS program are currently unavailable; and will be evaluated for the FY11 Annual Report.

3. FCRPS Cultural Resource Management at the Project. Funding for the Little Goose Project began in 1997 under the FCRPS Cultural Resources Management Program. To date, FCRPS projects have included preparation of planning documents, inventory survey, resource monitoring, site evaluation, assessment of collections, and treatment at one archaeological site (New York Bar).

a. Management Plans: A CRMP was prepared for the Lower Snake River Projects in 2000. Per the P.A., an updated HPMP will be initiated in FY11-12.

b. Inventory Survey: Approximately 1,988 acres have been surveyed since 1997, facilitating the assessment of previously recorded sites and the identification of additional sites. To date, inventory survey has identified an additional 17 sites, bringing the total for the Project to 93 sites. Survey gaps for the Little Goose Project will be the subject of a FY10 workshop.
c. Archaeological Site Evaluation: Two sites within the Project have been recommended potentially eligible for NRHP listing. A re-evaluation of sites formerly recommended as not eligible will be initiated in FY10.

d. Monitoring and Erosion Assessment: Monitoring of sites in the Project began in 1999. A formal monitoring program for all District Projects was developed in 2003. A continued program of monitoring occurs on various schedules depending on the type of resource, and imminent threats to the integrity of the site. A total of 55 sites were monitored under the District-wide program in FY08.

e. Stabilization: No sites within the Little Goose Project have been stabilized under FCRPS.

f. Traditional Cultural Properties (TCP): Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by the Washington Department of Archaeology and Historic Preservation. Summaries of pre-FCRPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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b. Pre- or Non-FCRPS

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1992 *Programmatic Memorandum of Agreement Between the U.S. Army Corps of Engineers, Walla Walla District, the Advisory Council on Historic Preservation, the Washington State Historic Preservation Officer, the Oregon State Historic Preservation Officer, and the Idaho State Historic Preservation Officer.* Western Heritage, Inc.
1. Project Description. The Lower Granite Lock and Dam and Lower Granite Lake Project (Project) is a large concrete, gravity dam and hydroelectric power plant on the Snake River in Whitman and Garfield Counties, Washington. The dam is located 22 miles south of the town of Colfax, Washington at river mile 107.5. Construction began in 1965. The main structure and three generators were completed in 1972, with an additional three generators finished in 1979.

Lower Granite Lake, behind Lower Granite Dam, extends 39 miles upstream and east to Lewiston, Idaho. The pool has a water surface area of 10,025 acres with normal pool levels 733-738’ above mean sea level. The Project has approximately 9,225 acres of fee title lands and 975 acres of easement land above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management at the Lower Granite Project began with survey in the late 1940s as part of the Smithsonian Institution’s River Basin Surveys program; and in the 1950-60s by researchers from WSU. The level of survey coverage survey is unclear; however, data indicate that it provided a limited sample of the total study area. Approximately 91 archaeological sites were identified through these surveys. Subsequently, a number of significant sites threatened by inundation were subject to excavation including: Captain John Talus Site (10NP1/10); Buffalo Eddy Site (10NP27); Upper and Lower Tammany Burial sites (10NP109/110); Tammany Talus Burial Site (10NP131); Steptoe Burial site (45AS2); 45AS4 (see also 45AS80 and 107); Tennmile Site (45AS26); Alpawa Site (45AS78/80); Alpaweya Burial Site (45AS81); Tamootsin Burial Site/Timothy’s Village (45AS82); Weiss Ranch House Site (45AS88/89); Pa Ma’Po Village (45AS99); Thorne Thicket Site (45WT36); Wawawai I Site (45WT39); Granite Point Site 45WT41); 45WT51; Ferguson Burial Site (45WT55); Ferry Tender Site (45WT104); Palus/Palouse Talus Burial (45WT56); Nisqually John Landing Site (45WT65); 45Ga7; and the Offield Bar Burial Site (45GA100).

In 1975, a post-impoundment reconnaissance survey was conducted that assessed the majority of previously recorded sites and identified at least five additional sites. Several sites were subsequently subject to test excavations: Hasotino Site (45NP151); Kelly Bar site (45GA37/145); Hereford Bar (45GA47/101); Wexpusnime Site (45GA61); Offield Bar Burial Site (45GA100); Knoxway Canyon Burial Site (45GA110/204); Moses Bar-Sout Site (45WT16); Blyton Landing Burial Site (45WT53); Wilma Bar (45WT78/79); Wilma Bar Burial Sites (45WT99/102/103); Lawyer Burial Site (45WT101, see also 45WT65); and Red Elk Rockshelter (10NP287). A number of petroglyph and pictograph sites were recorded in the late 1970s.

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 141 archaeological sites within the Project. Survey coverage data for the Project prior to FCRPS program are currently unavailable; and will be evaluated for the FY11 Annual Report.

3. FCRPS Cultural Resource Management at the Project. Funding for the Lower Granite Project began in 1997 under the FCRPS Cultural Resources Management Program. To date, FCRPS projects have included preparation of planning documents, inventory survey, resource monitoring, site evaluation, assessment of collections, and treatment at two archaeological sites.

a. Management Plans: A CRMP was prepared for the Lower Snake River Projects in 2000. Per the P.A., an updated HPMP will be initiated in FY12.
b. Inventory Survey: Approximately 2,657 acres have been surveyed since 1997 facilitating the assessment of previously recorded sites and the identification of additional sites. To date, inventory survey has identified an additional 18 sites, bringing the total for the Project to 159 sites (76 of these are partially or completely inundated). Survey gaps for the Lower Granite Project will be the subject of a FY10 workshop.

c. Archaeological Site Evaluation: Three sites within the Project have been determined NRHP eligible; and two sites have been recommended potentially eligible for NRHP listing. A re-evaluation of sites formerly recommended as not eligible will be initiated in FY11.

d. Monitoring and Erosion Assessment: Monitoring of sites in the Project began in 1999. A formal monitoring program for all District Projects was developed in 2003. A continued program of monitoring occurs on various schedules depending on the type of resource, and imminent threats to the integrity of the site. A total of 55 sites were monitored under the District-wide program in FY08.

e. Stabilization: Stabilization projects included the Chestnut retaining wall; and the Hasotino Site stabilization program. The latter involved the construction of a bio-engineered, 800-foot long stabilization structure.

f. Collections Assessment: Collections assessments for most of the sites within the Project have been completed. More specific numbers will be included in the FY11 FCRPS Annual Report.

g. Traditional Cultural Properties (TCP): Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by the Washington Department of Archaeology and Historic Preservation; and data provided by BPA. Summaries of pre-FRCPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

a. FCRPS

Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers

Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers


Collins, Mary B. and Dave N. Schmitt


Colville Confederated Tribes, History/Archaeology Program


Dean, J.C. and C.E. Dickson


Dickson, C.E.


Hart, E.R.


Hicks, B.A., editor


Jaehnig, M.E.W.


Johnson, P.


Johnson, P. and History/Archaeology Department, Colville Confederated Tribes


Kornmeyer, Natalie, Mary Collins, and Anna Remsberg


Moura, G., and D. Shannon


Nickens, P.R.

Nickens, Paul R., Jill A. Onken, F. Douglas Shields, Jr., and Michelle A. Wienhold.


Payos Kuus Cúukwe Cooperating Group


Pinkham, J.

2006 Identification of Traditional Cultural Properties Associated with the Nez Perce Tribe (Draft). Nez Perce Tribe, Lapwai, ID

Schmitt, D.N., A.K. Remsberg, N. Kornmeyer, and M.B. Collins


U.S. Army Corps of Engineers


b. Pre- or Non-FCRPS

Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers


2001 Report of Collections Examination and Inventory for Compliance with the Native American Graves Protection and Repatriation Act by the Museum of Anthropology at Washington State University. Washington State University, Pullman, WA. Prepared for the U.S. Army Corps of Engineers, Walla Walla, WA.


Collins, M.B., W. Andrefsky, Jr., D. Harder, K. Presler, K. Pollock, and R. Smith

1998 A NAGPRA Compliance Study and Archaeological Collections Inventory and Assessment of 45 Sites on the Lower Snake and Mid-Columbia Rivers. The Center for Northwest Anthropology, Washington State University Department of Anthropology, Pullman, WA. Contributions in Cultural Resource Management No. 63. Prepared for the U.S. Army Corps of Engineers, Walla Walla, WA.

Collins, M.B. and W. Andrefsky, Jr.


Draper, J.A.


Osbourne, D.


Reid, K. C., editor

U.S. Army Corps of Engineers


U.S. Army Corps of Engineers and the Advisory Council on Historic Preservation

1992 *Programmatic Memorandum of Agreement Between the U.S. Army Corps of Engineers, Walla Walla District, the Advisory Council on Historic Preservation, the Washington State Historic Preservation Officer, the Oregon State Historic Preservation Officer, and the Idaho State Historic Preservation Officer.*

Western Heritage, Inc.

APPENDIX K
Dworshak Dam and Reservoir Project
Additional Narrative Information

1. Project Description. The Dworshak Dam and Reservoir Project (Project) is a large concrete, gravity dam and hydroelectric power plant which impounds the North Fork of the Clearwater River, four miles northwest of the town of Orofino, Idaho. Construction began in 1966. The main structure and three generators were completed in 1972 and on line in 1973. Dworshak Reservoir extends 53 miles upstream. The reservoir level fluctuates between 1445-1600’ above mean sea level; at 1445’ amsl the pool surface is 9,050 acres, and at 1600’ amsl the pool surface is 17,090 acres. The project has approximately 20,500 acres of fee title lands and 5,000 acres of easement land above pool level.

2. Pre-FCRPS Cultural Resource Management at the Project. Cultural resource management at the Dworshak Project began with survey in the 1960s-70s by Idaho State University (ISU) and the University of Idaho (UI). The level of survey coverage is unclear; however, data indicate that it provided a very limited sample of the total study area. Approximately 49 archaeological sites were identified through these surveys. ISU conducted excavations at several sites following their survey. Excavated sites include: Bruce’s Eddy Site (10CW1); Ahsahka/Aquac/Aywawi Site (10CW5); Little North Fork site (10CW20); Indian Creek Site; Ash Site (10CW39); Drift Creek Site (10CW40); Elk Creek Site (10CW42); Big Spring Site (10CW43); Swamp Creek site (10CW225); and the Upper Terrace Site (10CW226).

Test excavations were also undertaken by UI at a number of sites during the 1980s, including: Ahsahka/Clearwater Fish Hatchery site (10CW4); Elk Creek Site (additional testing, 10CW42); and the Meadow Creek Rockshelter (10CW329). UI also conducted additional inventory survey in 1988.

In 1989, WSU-CNA conducted inventory survey within Project lands that visited a number of previously recorded sites and recorded an additional 158 sites.

In 1995, the Nez Perce Tribe-Cultural Resources Program (NPTCRP) conducted inventory survey within Project lands identifying 233 sites, 187 of which were isolates.

The Columbia River System Operating Review: Final Environmental Impact Statement, Appendix D – Cultural Resources, enumerated 214 archaeological sites within the Project. The SOR-FEIS likely did not include the sites recorded by the NPTCRP which were not formally reported until 2005 under FCRPS contract. Survey coverage data for the Project prior to FCRPS program, specifically, prior to 1980, have not been fully evaluated for acceptability of methods.

3. FCRPS Cultural Resource Management at the Project. Funding for the Dworshak Project began in 1997 under the FCRPS Cultural Resources Management Program. To date, FCRPS projects have included preparation of planning documents, reporting of inventory survey, resource monitoring, site evaluation, and assessment of collections.

a. Management Plans: A CRMP was prepared for the Dworshak Project in 2001. Per the P.A., an updated HPMP will be initiated in FY12.

b. Inventory Survey: FCRPS funded NPTCRP for the reporting of the intensive survey conducted by that program in 1995-1996, which, as noted above, recorded 233
archaeological sites/isolates. Additional survey is planned for FY10; and survey gaps for the Project will be the subject of a FY10 workshop.

c. Archaeological Site Evaluation: A re-evaluation of sites formerly recommended as not eligible will be initiated in FY12.

d. Monitoring and Erosion Assessment: Monitoring has been the main focus of the FCRPS program for the Dworshak Project. A site monitoring program for the Project was initiated 1999, with annual reports summarizing the results. The cumulative results of a nine-year monitoring program, between 1999-2008, was documented in a technical report that will guide future excavation and monitoring efforts, as well as site protection/stabilization.

e. Collections Assessment: Collections assessments for most of the sites within the Project have been completed. More specific numbers will be included in the FY11 FCRPS Annual Report.

f. Traditional Cultural Properties (TCP): Three of the four Indian Tribes participating in the FCRPS Coop Group Payos Kuus Cuukwe have provided preliminary information pertaining to TCPs. Because of the extremely sensitive nature of these resources/locations, consultation on TCPs will continue as appropriate so that the properties can be fully considered in monitoring and planning decisions. Of particular importance to the Dworshak Project is continued consultation with the Nez Perce Tribe.

Note: Inventory acreage calculations are based on data digitized into GIS by BPA. For the purposes of this report, the APE is calculated as all Corps fee and easement lands within the Walla Walla District Projects. Site calculations are based on data provided by BPA; and survey data on file at the Walla Walla District office. Summaries of pre-FCRPS studies were gathered from a number of primary and secondary sources available. All data will be re-analyzed and updated for the FY11 Annual Report.

4. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

a. FCRPS

Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers

Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers
2006 Memorandum of Agreement Between the U.S. Army Corps of Engineers and Bonneville Power Administration to cooperate in Historic Properties Management of Albeni Falls, Bonneville, Chief Joseph, Dworshak, Ice Harbor, John Day, Libby, Little Goose, Lower Gran

Cannell, K.G.

Cannell, K.G., N.F. Renk, and J.M. Davies

Colville Confederated Tribes, History/Archaeology Program
2007 Traditional Cultural Properties Associated with palus members of the Confederated Tribes of the Colville Reservation, Task B, Map Locations and Thematic Narrative Association

Davies, J.M.

Davies, J.M. and K.G. Cannell


Davies, J.M., K.G. Cannell and J.W. Lyon

Dickerson, Ken

Evans-Janke, Leah K., Stephen M. Yoder II, Marilyn Sandmeyer, Keith M. Moore, and John D. Baker

Johnson, P.

Nickens, P.R.

Payos Kuus Cúukwe Cooperating Group

Pinkham, J.
2006 *Identification of Traditional Cultural properties Associated with the Nez Perce Tribe (Draft)*. Nez Perce Tribe, Lapwai, ID

Renewable Technologies, Inc.


U.S. Army Corps of Engineers

b. Pre- or Non-FCRPS

Bonneville Power Administration, Bureau of Reclamation, and U.S. Army Corps of Engineers

1991 *Programmatic Agreement for Compliance with the National Historic Preservation Act* Among Bonneville Power Administration; Bureau of Reclamation, Pacific Northwest Region; U.S. Army Corps of Engineers, North Pacific Division; National Park Service, Pacific

Bonneville Power Administration, Bureau of Reclamation, and U.S. Army Corps of Engineers


Draper, J.A.


Draper, John A. and Deborah L. Olson


Hartmann, G.D.


Reid, K. C., Editor


U.S. Army Corps of Engineers


1992 *Programmatic Memorandum of Agreement Between the U.S. Army Corps of Engineers, Walla Walla District, the Advisory Council on Historic Preservation, the Washington State Historic Preservation Officer, the Oregon State Historic Preservation Officer, and the Idaho State Historic Preservation Officer.*

Western Heritage, Inc.

APPENDIX L
Chief Joseph Dam and Rufus Woods Lake Project
Additional Narrative Information

1. Project Description. The Chief Joseph Dam and Rufus Woods Lake Project ("Project") is a large concrete gravity dam and hydroelectric power plant on the upper Columbia River just upstream from the mouth of Foster Creek, near Bridgeport, Washington at River Mile 545. It acts as a re-regulating reservoir for the Grand Coulee Dam project approximately 50 miles upstream. The project was authorized in 1946 for purposes of power generation, recreation, and irrigation, and constructed from 1949 to 1958. Extensive modifications were authorized in 1969 and constructed between 1973 and 1979 to increase generating and hydraulic capacity as a third powerhouse was being added at Grand Coulee Dam. The reservoir behind the dam is approximately 51 miles long, with 106 miles of shoreline; normal full pool elevation is 956 feet above mean sea level (msl). Pool elevation fluctuates daily during the power generation cycle, but the reservoir normally is not drafted for floodwater storage. The project has over 13,000 acres of lands, including flowage easements (84% -- most with a cultural resources management taking) and fee title (12%).

2. Cultural Resource Management at the Project. Cultural resource management at the Project has occurred over the past 60 years, in several episodes. In the 1940s and early 1950s, the University of Washington under the auspices of the Smithsonian Institution's River Basin Surveys program surveyed the project and then excavated at several sites. When planning began for a 10-foot pool raise at the project in the 1960s, the National Park Service contracted with Washington State University for further inventory, evaluation, and data recovery. A partial inventory of shorelines on the Douglas County side of the reservoir was one result.

The Corps has managed historic properties at the Project under several different programs between 1975 and 1997. In the 1970's and early 1980's during construction of a 10-foot addition to the dam's storage capacity, the Corps sponsored an extensive historic property inventory, evaluation and data recovery program, including curation of data and materials from the work. Inventory at the Project found nearly 300 prehistoric and historic cultural resource sites, focusing on the zone to be inundated and areas immediately endangered by bank slumping expected immediately after the pool raise. Archaeological testing by the University of Washington evaluated about 100 prehistoric sites and developed a list of sites that supported a formal determination that the Rufus Woods Lake Archaeological District (RWLAD) was eligible for the National Register of Historic Places under Register Criterion D. Between 1978 and 1980, intensive excavations by the University of Washington recovered data from many prehistoric sites in the RWLAD. This work was supplemented in 1982 to 1984 by testing by Central Washington University at several more sites in the upper reach of the project near Columbia River mile (R.M.) 590. Several ancestral graves threatened by the pool raise also were relocated during this period; that work was supported by an ethnographic study to record tribal use of the project area and identify knowledge of the burial places, in hope of identifying family associations with the cemeteries. Collections of data and materials from the entire program were prepared for curation and then stored at the CCT's archaeological repository near Nespelem, Washington. Several important sites in the project on the original roster of sites for data recovery were not excavated as they would not be damaged immediately by construction or operations, but were placed on a "watch list" for periodic assessment of adverse effects. Between 1986 and 1998, the Corps used appropriated Operations and Management funding for historic property management including shoreline monitoring, curation, and emergency bank stabilization.

The Corps investigated a site in 1985 at which human remains had been found on an eroding bank (45-DO-193), to find and relocate the source graves before they were more fully exposed,
but was not able to confirm the source. In 1986, the Corps developed a Cultural Resources Management Plan (CRMP, Supplement 3 to Design Memorandum 38) for the operating project, with a 10-year program that scheduled and budgeted for site and shoreline condition assessment, routine administration and curation of collections. It identified a contingency plan for response to inadvertent discoveries of human remains and previously unidentified archaeological sites or occupations. Subsequent to the CRMP, the Corps carried out shoreline and site condition assessment on several occasions and investigated areas that would be affected by several real estate outgrants or disposal actions.

The Corps responded to the need to relocate human remains at site 45-DO-285 exposed by shoreline erosion on two occasions in the early 1990s, and in 1996 stabilized the prehistoric cemetery that was being affected, to prevent further losses. One of the relocation contracts also evaluated a newly recorded prehistoric archaeological site nearby for National Register eligibility. In 1997, the Corps contracted for archaeological investigations including test excavations at three sites damaged during a 1996 flood to support their stabilization.

In 1998, historic property management work at the project began a new phase under the FCRPS Direct Funding Agreement between BPA and the Corps that grew out of the 1990s System Operation Review. In accordance with provisions in a draft Systemwide Programmatic Agreement for FCRPS operations, a Historic Properties Management Cooperating Group (CG) was established with technical staff from BPA, the Project, the Seattle District office, Washington State Department of Archaeology and Historic Preservation and the Colville Confederated Tribes. The CG meets quarterly to identify, scope, review, and prioritize work items and take part in compliance work at the project.

Stabilization of banks at three sites took place in 1998. In 2000, the Corps began contracting with the CCT History and Archaeology Department (HAD) for CRM services at the Project. The first tasking was for a comprehensive reinventory of project shorelines and adjacent affected areas to assess the current condition of known and newly-identified properties and make recommendations for further management. During the field investigations, human remains were found on eroded beaches and emergency burial relocations were performed at two sites. The fieldwork discovered that one of the sites had more human remains in danger of eroding and recommended that the shoreline at the site be stabilized. Bank stabilization at site 45-DO-193 in 2001 was preceded by archaeological data recovery and relocation of human remains along the bank edge in areas that might be affected by construction.

The reinventory in 2000-2001 also recommended further investigations to evaluate a prioritized list of sites for National Register eligibility. Following up in 2002, HAD evaluated 59 archaeological sites for National Register eligibility through subsurface probes and test excavations, recommending all 59 as eligible, contributing members of the RWLAD. Recommendations for their management included further site condition assessment ("monitoring"), including detailed assessment of erosion rates, collection of important information from eroding shorelines and minor data recovery from archaeological features being exposed to loss from erosion. Such work has taken place annually since 2003. CG members took part in a cooperative effort to place minor stabilization repairs at Buckley Bar in summer 2005. One set of human remains that was exposed by vandalism was relocated and reburied in 2006. HAD carried out an inventory of project fee and intensively managed lands in 2005-2006 with the goal of identifying areas around the Dam and in wildlife management or recreation areas that would not require individual Section 106 consultation for periodic maintenance actions. CCT-HAD also completed a report of site evaluation from work done during the pool raise era at 45-OK-28.

In 2001, the program launched investigations by CCT-HAD to identify Traditional Cultural Properties at the project, completing the initial effort in 2007. The study identified a Traditional fishery at the Chief Joseph Dam, which was characterized by a study completed in 2009, and which is the subject of a Determination of Eligibility effort scheduled for 2010.
The FCRPS cultural resource management efforts at the project since 1998 supported preparation of an updated HPMP for the project to address requirements in the draft Systemwide Programmatic Agreement. The HPMP prepared by the CG in 2006-2008 was approved at Northwestern Division in early 2009 and is the source for most of the information in this appendix and the report to which it is attached. The revised HPMP included a 10-year program to achieve and sustain compliance with NHPA and other mandates for historic property management. The HPMP scheduled and budgeted for priority actions, and included a detailed Action Plan for the period 2008-2017. Future actions include a major stabilization at one site and development of public information media and programs.

3. Notes on the Data. Data for the tables in the annual report derive from several sources. The following discussion presents information about the data sources and their status and reliability. Data were taken insofar as possible from the Project's approved HPMP (2009), and except for accounts of achievements in the last year, are statused as of September 2008, when the program design was frozen. Sections 4.7 to 4.13 are most pertinent.

a. Project Areas.

i). Project Area (or APE, if affirmed). The Project uses the original real estate taking line as the outer boundary for the APE as it was based on a detailed scientific geological assessment of the potential of the project to cause flooding, erosion, landslides and other earth-disturbing events. Added lands were taken for construction, wildlife management and recreation purposes, all purposes that involve work that can disturb sediments. The cell reflects the APE acreage between the outer boundary and the original river bank, and includes permanently inundated lands as well as land areas above the current high pool.

ii). Project Real-Estate-Based APE Mapped. Yes -- mapping and boundary monumentation are verified and sufficiently accurate to allow use of a real-estate map based APE.

b. Inventory Information.

i). Archaeological Survey. Before FCRPS Program (a/o 1996). Although survey at the project took place in the 1940s and 1969-1970, no survey areas can be determined for that work. However, the Project is extremely fortunate in having precise data on inventory carried out in the 1970s-1990s. During this period, inventory transects were recorded on aerial photographs and transferred to project maps. These data were digitized and traced into polylines shapefiles by BPA's GIS specialist. Total transect lengths calculated with X-Tools table operations scripts were multiplied by visually swept area and converted to acreage to render inventory saturation. Before 1990, standard transect intervals were 30 meter (or 100 foot); after 1990, 15 meter (or 50 foot) intervals were standard; the intervals were used as the visually swept area to estimate inventory saturation.

FCRPS 1997-2009. This cell contains values calculated from both polyline and polygon data. Where polylines were available (most based on GPS tracklogs), the lengths were multiplied by swept widths (both 15- and 20 meter widths are present in the data set) and converted to acres.

As the 2001 reservoir resurvey did not include polygonal or polyline records of surveyed areas but relied on statements of coverage after GPS recording of survey lines failed, we had to estimate the saturation. All of the area encompassed by the "Guide Taking Line" was included in the survey, at 20 meter intervals, except for areas too steep to survey. We created an estimate of saturation using 75% of the total shoreline length multiplied by an average surveyed width at 300 feet, converted to acres. Polygonal data include 2005
survey of identified polygonal tracts rendered as 100% of the areas specified in the contract statement of work using both 15- and 3-meter intervals. More precise geodata on the 2001 and 2005 surveys may exist, and if the data are found, will be used to refine the statement of surveyed area. One very important note: unsurveyed project land area below the 946’ contour line may be of great importance in the future should dam modifications require drafting the reservoir to conservation pool levels for any length of time.

ii). Archaeological Site Count. The site counts for the project do not include permanently inundated sites that have been inferred from aerial photographic interpretation, but not verified.

Total Sites before FCRPS Program (a/o 1996). The count in this cell derives from a spreadsheet used to analyze impacts of FCRPS operational alternatives during the 1990-1996 System Operation Review; the data were archived in 1996.

Total Sites identified 1997-2009. The count in this cell is given by subtracting the current (September 2008) site count presented in the Project's HPMP from the above pre-FCRPS site count.

iii). Archaeological Site Evaluation Status. "Evaluation" includes any technique used to assess significance of a site under Criterion D; test excavation, bank scraping and minor feature retrieval and radiocarbon dating, surface collection, and recording of rock art all are included as evaluation actions.

Sites before FCRPS Program (a/o 1996). The count in this cell is derived from information in the project's approved HPMP. Most of the site evaluation occurred during the Pool Raise era in 1977-1979. This cell also contains counts after 1996 derived from work not funded by the FCRPS program.

Sites Evaluated 1997-2009. The count in this cell also is from the project's approved HPMP; the count includes the 2002-2003 site evaluation program as well as several sites investigated during annual shoreline monitoring.

iv). National Register Status (Archaeological Sites). These data reflect cumulative outcomes of the National Register evaluation process. Generally, the cells for NRHP Listed/Determined Eligible and NR Districts are easiest to fill as the category requires specific documentation. The data in them are most reliable. They also are the most important data for measuring program progress. Unevaluated Sites also is an important datum and progress measure. Far less reliable or precise are the other categories, which often reflect a variety of opinions and sometimes are not well documented specifically. Most cultural resource managers are very reluctant to firmly declare sites ineligible/noncontributing as so frequently the ineligible or insignificant site of one era has become highly important in the next.

NRHP Listed and/or Determined Eligible Sites (D). Includes all listings and determination from all sources and management periods. Sites proposed for treatment of adverse effect usually have determinations in this category.

NR Districts. See above.

Sites Determined Not Eligible or Non-contributing. There is no paperwork declaring sites in this status.

Sites Considered Eligible. This cell reports opinions by contractors but with no specific concurrence documentation.
Sites Considered Not Eligible. This cell reports opinions by contractors but with no specific concurrence documentation.

Unevaluated Sites. This cell reports numbers of sites that either have received no evaluation effort or have not been evaluated sufficiently to support a recommendation. If unlisted, unconfirmed permanently inundated sites were admitted to the inventory, they would fall in this category.

v). TCP Studies Status (Interim; all Management Phases).
TCP Studies before FCRPS Program (a/o 1996). An ethnographic study took place in support of graves relocation work in the 1970s.

TCP Studies under FCRPS 1997-2009. Two TCP studies have been completed and a third is beginning in 2010.

c. Site Treatment or Mitigation. This category reports actions taken to address adverse effect related to the Project.

i). Before FCRPS Program (a/o 1996). This project has very significant pre-FCRPS mitigation, largely carried out in the 1970s and 1980s in support of the pool raise as discussed in Paragraph 2 above.

Sites Stabilized. One site was stabilized in 1996.

Data Recovery. Data recovery at a wide variety of prehistoric and historic archaeological sites occurred, and the technical reports form a major resource for the Upper Columbia River basin’s prehistoric record.

ii). FCRPS Program 1997-2009. Action to address adverse project effects began as noted in Paragraph 2 above.

Sites Stabilized. See Paragraph 2. Stabilization at site 45-OK-239 is in design.

Data Recovery. Data recovery has taken place at one site in conjunction with an emergency relocation of ancestral burials just before site stabilization in 2001.

Visitor Center Displays. One prepared in 1988; revision planned for the near future.

Brochures. None to date; will be prepared in future year.

CDs/DVDs. All reports prepared by the FCRPS program have been archived as Adobe Acrobat PDF files on CDs, along with scanned PDF of most pre-FCRPS reports.

Book. None.

Volunteer Projects. None.

Other. "No Digging" ARPA warning signs were placed at common access points along the reservoir in 2007. Extensive geodata sets have been prepared and archived, including georectified 1970s site excavation maps with feature photographic overlays.

d. Curation. The Project uses the first Corps-supported Tribal Archaeological Repository as the source of its curation. The Colville Confederated Tribes’ Archaeological Repository was established by the terms of a 1980 lawsuit settlement and went into operation in 1984. Curation of collections from the Project is funded annually by contract.
Artifacts (cu. ft.). The estimate is derived from figures in published reports and contract documents.

Records (linear ft.). See above. Offsite storage of duplicate records is being arranged and may take place in late 2010 or 2011.

Permanent Repositories with Curation Agreements. See above.

Temporary Repositories or Permanent Repositories without Curation Agreements or Funding. None.

4. Notable Achievements during the Reporting Period. For the purposes of this report, the period is the FCRPS program period from 1997 through September 2009. In addition to completing reservoir resurvey and site evaluations, the program resulted in major achievements in traditional cultural property management and control of erosion affecting archaeological sites.

a. TCP Studies. As noted in Paragraph 2, a study by the CCT-HAD identified and mapped many previously undocumented place names and potential traditional cultural properties at the Project, including a fishery at the Chief Joseph Dam that was established in 1956 as a replacement for other fisheries that were lost when the dam was built. The Dam fishery may actually be a re-establishment of a traditional fishery at Foster Creek that is known archaeologically, and which was disrupted by agricultural and political developments in the late 19th century. CCT-HAD will be preparing a Determination of Eligibility for the property in 2010.

b. Site Stabilization (Erosion Control). The effort in 2001 to stabilize 45-DO-193 resulted in significant data recovery as well as a site preserved in place. An important cooperative stabilization project took place at Buckley Bar in 2005; Corps project staff and CG members hand-placed fill in low areas on existing riprap to prevent overtopping and end-run channel capture.

Pictograph near Turtle Rock, a traditional fishing site (2005, courtesy of CCT-HAD).

Shoreline overview at 45OK2 with crew member standing on black plastic squares, eroding out of 1979 backfilled test units (2006, courtesy CCT-HAD)

6. Bibliography. The following bibliography includes all known references to cultural resources at the project from the beginning of archaeological investigations to the present date. The references are separated by pre- or non-FCRPS program-funded efforts, and references for work funded under the FCRPS program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

a. FCRPS

Chief Joseph Dam Cultural Resources Cooperating Group

Covington, B.L. and J.O. Pouley

Engseth, M.F. and V. Morgan

Hamilton, S. and B. Hicks
McCroskey, L.
Pouley, J.O.
Salo, L.V.
Shannon, D.

Shannon, D. and G. Moura


Shannon, D. and G. Moura


Shannon, D. with L. Harry and G. Moura


U.S. Army Corps of Engineers, Seattle District


2005 Project Executive Summary, Buckley Bar Shoreline Protection. Seattle.

b. Pre- or Non-FCRPS.

Benson, J.R. and J.V. Jermann


Campbell, S.K.


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1985 Summary of Results, Chief Joseph Dam Cultural Resources Project. Office of Public Archaeology, Institute for Environmental Studies, University of Washington, Seattle.

Campbell, S.K. with L. Hause, S. Livingston and N.A. Stenholm


Chatters, J.C., et. al.


1984 Human Adaptation along the Columbia River, 4700-1600 BP. A report of Test Excavation at River Mile 590, North Central Washington. Research Reports 84-1, Graduate Studies and Research, Central Washington University, Ellensburg, Washington.

Chief Joseph Dam Cultural Resources Cooperating Group


Fredin, A.


Galm, J.R. and S.A.C. Keller

Garner, J.C.

Hartmann, Glenn D.

Jaehnig, M.E.W.


Jermann, J.V.

Jermann, J.V., and K.A. Whittlesey


Jermann, J.V., W.S. Dancey, and K.A. Whittlesey

Jermann, J.V., W.S. Dancey, R.C. Dunnell, and B. Thomas

Leeds, L.L., W.S. Dancey, J.V. Jermann, and R.L. Lyman

Leonhardy, F.C.

Livingston, S.

Lohse, E.S.


Lyman, R.L.

Miss, C.J.


Moura, G.F. and C.J. Miss

Moura, G.F.

Munsell, D.A., and L.V. Salo

Office of Public Archaeology, University of Washington

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Osborne, H.D.

Osborne, H.D., R. Crabtree, and A. Bryan

Salo, L.V.
Salo, L.V. and D.A. Munsell
Salo, L.V., and J.A. Maas
Singleton, W.L.
Sprague, R.
Sprague, R., and J. Miller
Sprague R. and T.M.J. Mulinski
Thomas, B., L.L. Larson, and M.G. Hawkes
U.S. Army Corps of Engineers, Seattle District
Weaver, D. and D. Shannon
APPENDIX M
Albeni Falls Dam and Pend Oreille Lake Project,
Additional Narrative Information

1. Project Description. The Albeni Falls Dam and Pend Oreille Lake Project is a Federal hydroelectric and local flood control facility constructed in the early 1950s in Bonner County, Idaho. The Seattle District, U.S. Army Corps of Engineers operates and maintains the Project for the multiple authorized purposes of power generation, navigation, recreation, flood control, and fish and wildlife conservation. The Project provides over 1.1 million acre-feet of useable storage for 15 downstream Federal and non-Federal hydroelectric projects. The reservoir includes all of Pend Oreille Lake and 25 miles of the Pend Oreille River between the dam and the lake. The pool elevation usually varies from a low range of 2,051-2,055 feet to a maintained high of 2,062.5 feet above mean sea level (amsl). There are over 18,000 acres of real estate at the project. Corps fee title real estate comprises 23 percent; the rest is less-than-fee estate such as flowage easement estates or licenses from lands in private, U.S. Forest Service, or state or local government ownership.

2. Cultural Resource Management at the Project. Initial inventory at the project took place in the 1940s and 1950s under the Smithsonian Institution’s River Basin Surveys program, with brief and sparsely reported evaluation at a few sites. Scant archaeological work occurred until the 1970s when the Corps began historic property/cultural resources management at the Project with archaeological inventory at several fee-owned recreational and wildlife areas. A more comprehensive archaeological inventory of shorelines took place in the 1980s, and the effort continues to date in selected localities. As of December 2006, nearly 400 prehistoric and historic archaeological sites had been found at the project. About 10 percent of the sites, most on Federal fee lands, have been evaluated for National Register eligibility under criterion D through archaeological test excavation; and about half of these have been found eligible as of December 2006. Periodic shoreline inspections also are accumulating information that can be used to archaeologically evaluate sites and assess project effects on them.

The Corps sponsored a study in 1985 to consolidate ethnographic information about Kalispel Indian Tribal use of the Project area, and studies to identify Traditional Cultural Properties continue annually. Individual properties have been recommended as eligible for the Register under criteria other than D.

Three National Register districts have been identified within project boundaries as of December 2006: the East Pend Oreille Lake Rock Art Historic District (EPOLRAD) (Register criteria A and D); the Upper Pend Oreille River Archaeological District (Register criterion D); and the Lake Pend Oreille Lime and Cement Industry Historic District. The Corps submitted a request for concurrence in a determination of eligibility for the EPOLRAD to Idaho SHPO in 2009. A determination of eligibility concurrence request for the Upper Pend Oreille River Archaeological District is being prepared in 2010. The Corps completed a context, inventory, and evaluation for the Albeni Falls dam power production facilities themselves in 2005; the report recommended the facilities as Register-eligible, but no action has taken place to obtain concurrence in the recommendation. Individual determinations of eligibility have been submitted to ISHPO for each treated site described in the next paragraph.

In September and October 2000, emergency treatment was applied within the EPOLRAD to protect rock art site 10-BR-933 from vandalism. A small length of bank at an early historic cemetery area at site 10-BR-20 was temporarily stabilized in 2002 and permanently stabilized in spring 2003. Another area at the same site was stabilized with biological measures in 2005. Additional stabilization is planned at 10-BR-20 for summer 2010. Eroding banks at 10-BR-14, 10-BR-94 and 10-BR-111 were stabilized in 2006-2009. Archaeological sites 10-BR-90, 10-
BR-115 and 10-BR-539 also have been stabilized in the past 10 years incidental to real estate management activities.

A draft historic properties management plan (HPMP, also known as Design Memorandum 28) for the Project was developed in the late 1980s and revised in 1993 to formulate a program to manage Project effects on historic properties. The program was partially implemented during 1994-1997 with Bonneville Power Administration's (BPA) support under a 1991 Programmatic Agreement associated with the Intertie Development and Use Environmental Impact Statement (IDU PA). Annual Action Plans for budgetary purposes (FY1993-1997) also were developed to support the Columbia River System Operation Review and IDU PA implementation.

From 1994-1997, a Historic Properties Management Cooperating Group (CG) comprising technical staff from BPA, the Project, the Seattle District office, Idaho Panhandle National Forest Sandpoint Ranger District, Idaho State Historical Society and SHPO, Coeur d'Alene Tribe, Confederated Salish and Kootenai Tribe of the Flathead Reservation (CSKT), Kalispel Tribe of Indians, and Kootenai Tribe of Idaho met periodically to identify, scope, review, and prioritize work items and take part in compliance work at the project. The CG has continued under the FCRPS Direct Funding Agreement program begun in 1997, meeting quarterly to review and guide program progress.

In 2006-2008, the CG revised the project's HPMP to address requirements in the draft Systemwide Programmatic Agreement. The revised HPMP included a 10-year program to achieve and sustain compliance with NHPA and other mandates for historic property management. The HPMP scheduled and budgeted for priority actions, and included a detailed Action Plan for the period 2007-2012. The HPMP was approved by Northwestern Division in January 2008. The FCRPS Programmatic Agreement was ratified by the ACHP in October 2009, and in consequence, the CG is working on a project-specific Programmatic Agreement that will be used for parties other than the Corps of Engineers to affirm the management provisions in the HPMP.

3. Notes on the Data. Data for the tables in the annual report derive from several sources. The following discussion presents information about the data sources and their status and reliability. Data were taken insofar as possible from the approved HPMP or the files used to assemble it, and except for accounts of achievements in the last 3 years, are statused as of January 2007, when the HPMP program design was frozen. Chapter III and its associated tables provide most of the data on current site counts and eligibility status.
a. **Project Areas.**
   i). **Project Area (or APE, if affirmed).** The table uses the areas in the Corps’ CAD-derived shapefiles for the total land area above the Ordinary Low Water line (a contour that may range from 2048 to 2051’-- the actual value is unspecified anywhere!!) taken for the project's construction, operation and maintenance. An accurate real-estate boundary-based APE polygon is not yet possible to construct as the base maps for the project area (GLO plats and USGS) have serious errors replicated in the Corps' real estate map layers. However, as the total acreage values within the polygons within a few acres with the values in Corps REMIS database (and includes some areas that have null values in REMIS), we used the GIS-calculated values as the reporting basis.

   ii). **Project Real-Estate-Based APE Mapped.** No accurate real estate boundary map is available for the Project. The Project's HPMP uses a provisional APE map comprised of polygons developed from field-mapping of Federal fee lands merged with a polygon created at the 2080' amsl contour line for the upper land limit. The lower land limit at the 2048’ contour line is still under construction using georegistered pre-Reservoir maps and aerial photographs, and recently flown LiDAR data.

b. **Inventory Information.**
   i). **Archaeological Survey.**

   **Before FCRPS Program (a/o 1996).** Most of the value in this cell is rendered by multiplying the project land area by 0.9; the contracted 1980s surveys covered 90% of the project area using transects spaced at 100-foot intervals. (More precise survey track data may exist as paths or polygons drawn on aerial photos (or registered overlays) that are stored in archives but have not been located yet. If the archived data are found they will be be used to create polyline or polygon shapefiles for more accurate accounting of survey.) Some linear and polygon survey geodata for Corps inhouse efforts during this period also exist. Before 1990, standard intervals were 30 meter (or 100 foot); after 1990, 15 meter (or 50 foot) intervals were standard. A statement that all cut banks at the project have been inventoried can be made with high confidence, in the absence of precise measurements.

   **FCRPS 1997-2009.** Values in this cell are derived from reported transect length multiplied by transect width (50 feet) and converted to acres. Significant lengths of transect in the Clark Fork Delta resurvey by KNRD may not yet be entered into the geodatabase and will appear in the next project reporting cycle.

   ii). **Archaeological Site Count.**

   **Total Sites before FCRPS Program (a/o 1996).** The value in this cell derives from a spreadsheet used to analyze impacts of FCRPS operational alternatives during the 1990-1996 System Operation Review; the data were archived in 1996.

   **Total Sites identified 1997-2009.** The value in this cell is given by subtracting the current (January 2007) site count presented in the Project's HPMP from the above pre-FCRPS site count.

   iii). **Archaeological Site Evaluation Status.** "Evaluation" includes any technique used to assess significance of a site under Criterion D; test excavation, bank scraping and minor feature retrieval and radiocarbon dating, surface collection, and recording of rock art all are included as evaluation actions.

   **Sites before FCRPS Program (a/o 1996).** The value in this cell is derived from information in the project's approved HPMP. Most of the site evaluation occurred in the mid-1990s during IDU PA implementation. This cell also contains counts after 1996 derived from work by others or not funded by the FCRPS program. Evaluation has
occurred primarily on sites on Federal fee lands; most evaluations on flowage estate lands have taken place by shoreline development permit applicants.

Sites Evaluated 1997-2009. See previous items.

iv). National Register Status (Archaeological Sites). These data reflect cumulative outcomes of the National Register evaluation process. Generally, the cells for NRHP Listed/Determined Eligible and NR Districts are easiest to fill as the category requires specific documentation. The data in them are most reliable. They also are the most important data for measuring program progress. Unevaluated Sites also is an important datum and progress measure. Far less reliable or precise are the other categories, which often reflect a variety of opinions and sometimes are not well documented specifically. Most cultural resource managers are very reluctant to firmly declare sites ineligible/noncontributing as so frequently the ineligible or insignificant site of one era has become highly important in the next.

NRHP Listed and/or Determined Eligible Sites (D). See description in paragraph 2 above. Includes all listings and determination from all sources and management periods. Sites proposed for treatment of adverse effect usually have determinations in this category. NR Districts. See above.

Sites Determined Not Eligible or Non-contributing. There is no paperwork declaring sites in this status.

Sites Considered Eligible. This cell reports opinions by contractors but with no specific concurrence documentation.

Sites Considered Not Eligible. This cell reports opinions by contractors but with no specific concurrence documentation.

Unevaluated Sites. This cell reports numbers of sites that either have received no evaluation effort or have not been evaluated sufficiently to support a recommendation. At AFD, most of the sites on flowage estates fall in this category.

v). TCP Studies Status (Interim; all Management Phases).
TCP Studies before FCRPS Program (a/o 1996). Dr. Allan H. Smith was contracted in 1984-85 to work up ethnographic data from the 1930s to shed light on Kalispel Tribe use of the project area. A draft report was prepared.

TCP Studies under FCRPS 1997-2009. Interviews with Kalispel Tribe elders have been included as part of annual cultural resource management taskings to the Kalispel Tribe’s Natural Resource Department (KNRD) since 1997. KNRD also is completing the above report started in the 1980s. These studies have been especially helpful in determining significance for the EPOLRAD and its contributing sites, and for significance assessments at stabilized sites 10-BR-20, 10-BR-90, 10-BR-94 and 10-BR-933.

d. Site Treatment or Mitigation. This category reports actions taken to address adverse effect related to the Project.

i). Before FCRPS Program (a/o 1996).
Sites Stabilized. Several sites in upland portions of flowage estates were stabilized by private landowners working under Nationwide or Regional Permits, but quantities are unknown and quality of preservation also is not assessed. Most such stabilized sites have been subsequently affected to unknown degrees by development in the upland portions.

Data Recovery. No data recovery at the project occurred before the FCRPS period. Data recovery by others or with non-FCRPS funds has occurred at several sites within the
provisional APE. The Corps' Riley Creek Recreation Area Modernization Program resulted in data recovery at 10-BR-99 in 2003 and 2009 outside of FCRPS funding.

**ii). FCRPS Program 1997-2009.** Action to address adverse project effects began as noted in Paragraph 2 above.

**Sites Stabilized.** See Paragraph 2.

**Data Recovery.** Data recovery at Site 10-BR-115 was done before stabilization at the site in 2007.

**Visitor Center Displays.** AFD visitor center display was updated with input from KNRD, and is proposed for revision in the near future.

**Brochures.** One brochure has been prepared by the Sandpoint Ranger District, Idaho Panhandle National Forests, for the CG in 2009, printed by BPA, and provided to several distribution points.

**CDs/DVDs.** Work in this category has focused on acquisition of historical photography and imagery, including the 1860's International Boundary Commission maps and photos, as well as project-related images in the Bonner County Museum. Rock art imagery also has been accumulated. At least 6 CD's of digitized imagery of all subjects have been prepared.

**Book.** None have been prepared yet.

**Volunteer Projects.** Recordation of rock art at two sites used volunteers, but no routine volunteer projects are in place.

**Other.** The Kootenai Tribe of Idaho since 2005 has carried out on-site monitoring at Bear Paw Rock to discourage vandalism during peak tourism seasons. The Project also will be installing standard Corps of Engineers ARPA warning signs ("No Digging etc") in 2010. Extensive geodata have been created for the project and archived in BPA's GIS program.

e. **Curation.** The AFD project does not yet have an established routine curation program or source. The Corps intends to contract for an assessment and initial accessioning of its collections in the near future. Idaho SHPO has indicated that a facility in Idaho should be used for permanent curation. The North Idaho Archaeological Records Center at the University of Idaho in Moscow, Idaho is the SHPO-preferred source. Data for this table come from information provided by the District during annual reports on curation status to the Corps's Curation Center of Expertise in St. Louis District.

**Artifacts (cu. ft.).** The estimate is derived from figures in published reports and inspection of collections in temporary holdings at several locations. It is rough.

**Records (linear ft.).** Information is not yet available; pending collections assessment. Should include paper and digital project records held at the Seattle District office in Seattle, Washington.

**Permanent Repositories with Curation Agreements.** See introduction to this section.

**Temporary Repositories or Permanent Repositories without Curation Agreements or Funding.** Collections are at Eastern Washington University, Archaeological and Historical Services; NIRAC; Northwest Archaeological Associates, Inc. in Seattle; and at the Kalispel Tribe Natural Resources Department in Usk, Washington.

4. **Notable Achievements during the Reporting Period.** For the purposes of this report, the period is the FCRPS program period from 1997 through September 2009. In addition to
completing major inventories and site evaluations, the program resulted in major achievements in rock art site management and control of erosion affecting archaeological sites.

a. **Rock Art Management.** Two of the most significant achievements during that period have been cooperative efforts to record and preserve the Project's petroglyphs (rock images) that are of great importance to the region's tribes. The first, in 2000, involved concealment of a site that was being affected by vandalism using a flexible earthen membrane, after thorough documentation of the site. The second, in 2005, was a detailed recording of rock art on a Corps-owned island in support of the EPOLRAD determination of eligibility. In both instances, members of the project's Cooperating Group worked together at the sites. Experimental recording of petroglyph panel at Bear Paw Rock using an early generation of portable LiDAR was partially successful at developing a 3-d representation of the panel. Another achievement has been on-site monitoring at Bear Paw Rock by Kootenai Tribe of Idaho members during peak recreational seasons that has helped prevent serious vandalism since 2005.

b. **Site Stabilization (Erosion Control).** Since its inception, the program has focused on archaeological site bank stabilization as the desired treatment to address adverse project effects. Major bank stabilization has taken place at seven sites, four funded by the FCRPS HPM program and the other three as a result of actions funded by other programs. One other major achievement for the program has been a physical inventory and GPS mapping by USFS cooperators of installed bank stabilization along the Pend Oreille River. The inventory occurred initially in 2003 and was updated in 2009; it is crucial to environmental impact analysis in support of future bank stabilization projects under the FCRPS program.


Area at 10-BR-933 prepared for detail recording before concealment, fall 2000.
Preparing surface at 10-BR-933 for concealment after recording, fall 2000.

Recording panel at 10-BR-621, spring 2005.

Placement of spall fill pad on filter fabric, 10-BR-94, spring 2006

6. Bibliography. The following bibliography includes all known references to cultural resources at the project from the time archaeological investigations began to now. The references are separated by pre- or non-FCRPS program-funded efforts, and references for work funded under the FCRPS program since 1997. Future reports will include only increments or corrections to data presented herein.

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APPENDIX N
Libby Dam and Lake Koocanusa Project,
Additional Narrative Information

1. Project Description. The Libby Dam and Lake Koocanusa Project (Project) on the Kootenai River in Lincoln County, Montana, 222 river miles upstream from the confluence of the Kootenai and Columbia Rivers was built by the U.S. Army Corps of Engineers (Corps) under the authority of the Flood Control Act of 1950. Construction began in spring 1966 and was completed in 1973. The Project became operational for flood control in 1972, and started generating power in 1975. Libby Dam is operated as a unit of the integrated Federal Columbia River Power System (FCRPS) for flood control, navigation, hydropower, irrigation, recreation, and fish and wildlife management. The reservoir or power pool behind the dam, named Lake Koocanusa, is 90 miles long (42 miles in British Columbia, Canada and 48 miles in the United States). The Project's boundary included all of the lands that would have to be taken to construct and operate the project. The boundary was based on the Project's potential to affect the area covered by the high pool and lands 300 feet outward horizontally from the full pool line. In some instances the take line was adjusted to include geologically unstable areas or areas where erosion could reasonably be expected to exceed the 300-foot margin. Real estate also was taken outside the reservoir impact area to provide for major road, railroad, utility and residential or other relocations. Approximately 16,000 acres acquired by the Corps for the Project were transferred to and are now managed by the U.S. Forest Service, Kootenai National Forest (KNF). Nearly 2,000 acres within the Project are administered solely by the Corps.

2. Cultural Resource Management at the Project. Since the late 1940s, cultural resource management at the Project has taken place under several different Federal historic preservation programs. Efforts have focused on developing inventories of archaeological sites, evaluating site National Register eligibility and determining project effects, and carrying out ethnohistoric and ethnographic studies. Condition monitoring to document reservoir effects on selected sites has been a significant, integral long-term management strategy. The program has used data recovery, site protection, and site stabilization to address adverse project effects at several archaeological sites. Ethnographic work in the region over the past 175 years has developed information about use of the area by regional Indian tribes, primarily the Kutenai. The exploration, fur trade and Christian missionizing era beginning in the early 19th century resulted in many valuable records. During the anthropological era starting in late 19th and early 20th centuries studies were carried out by Edward Curtis, Claude Schaeffer, Harry Tolbert Turney-High, George Dawson, Verne Ray, James Teit and Clark Wissler.

a. National Park Service Era. The first archaeological inventory occurred under the auspices of the Smithsonian Institution's River Basin Studies program as part of Federal planning in the late 1940s and early 1950s for development of the FCRPS. When plans for the construction of Libby Dam and Lake Koocanusa were finalized in the late 1960s, under the provisions of the Reservoir Salvage Act of 1960, the National Park Service contracted the University of Montana for inventory and site evaluation during the summers of 1966 and 1967, much of which took place on sites that are now permanently inundated.

b. Agency Era. When the Reservoir Salvage Act was amended in 1974 by Public Law 93-291, the cultural resource management responsibilities at Corps projects passed from the National Park Service to the Corps. In the spring of 1975, the Corps conducted a limited inventory of the Kootenai Flats and Bristow Creek area during a regularly scheduled reservoir draft, finding a significant number of archaeological sites. In response, the Corps contracted for an inventory by Montana State University in 1976 to estimate the number of sites in the drawdown and support development of a preliminary Cultural Resources Management Plan or Design Memorandum. The results suggested that well over 400 sites might be present.
and the final report recommended additional surveys. More sites were discovered in 1978 and 1979 during inventory and archaeological testing incidental to proposed recreation facilities (Montana State University) and the proposed Libby Additional Units and Reregulating Dam (LAURD) Project (University of Idaho, then Montana State University).

Site evaluation at the LAURD project supported a determination of eligibility for the Libby-Jennings Archaeological District in 1979. The LAURD project also led to mitigation by data recovery at several prehistoric sites (e.g., the LAURD haul bridge road site (24LN1036, 1978).

Large-scale inventory by Washington State University in areas exposed by Lake Koocanusa's annual drawdown began in 1982 and continued through 1983. Inventory encompassed most of the exposed area; follow-on inventory focused on shoreline areas above the high pool adjacent to seasonally-inundated landforms with high site densities. Sites were evaluated under National Register Criterion D using a mix of systematic surface collections and test excavations. Following these inventories and evaluations, KNF proposed the Middle Kootenai River Archaeological District (MKRAD) and identified potentially contributing sites.

In the 1980s the Corps funded several ethnographic studies including Alan Smith’s 1984 study of Kutenai subsistence and settlement patterns, and Manning’s 1983 Kootenai Indian ethnohistory. In 1981, an archival review of the Kootenay fur trade and its establishments began, but remains incomplete. Since 1987, the CSKT Preservation Department has conducted a place name study, interviewed elders about Traditional Cultural Places, and conducted evaluations of sites for cultural significance.

By 1985 it became clear that a long-term management strategy was needed to continue ongoing inventory of areas where sediments, newly exposed by reservoir operations, were likely to contain cultural materials; to evaluate newly recorded sites; and to respond to adverse effects on significant sites. Meanwhile, KNF carried out data recovery at Bristow Creek (24LN1054 (1985). In 1987 the Corps prepared a Cultural Resources Management Plan (CRMP, Supplement to Design Memorandum 44) to develop program goals, schedules and budgets, and developed “Action Plan O” to govern implementation of the CRMP in concert with the KNF. The monitoring program initially focused on three groups of sites, each in a distinct environmental zone, to record any material exposed during the annual drawdown. In 1987, KNF inventoried many landforms with a high probability of archaeological sites.

c. IDU PA Era. The program was partially implemented during 1994-1997 with Bonneville Power Administration’s (BPA) support under a 1991 Programmatic Agreement associated with the Intertie Development and Use Environmental Impact Statement (IDU PA). Annual Action Plans for budgetary purposes (FY1993-1997) also were developed to support the Columbia River System Operation Review and IDU PA implementation.

From 1994-1997, a Historic Properties Management Cooperating Group (CG) comprising technical staff from BPA, the Project, the Seattle District office, Kootenai National Forest and Confederated Salish and Kootenai Tribe of the Flathead Reservation (CSKT)1 met periodically to identify, scope, review, and prioritize work items and take part in compliance work at the project.

By 1994, the program had discovered that many sites were at great risk from erosion, vandalism and looting and refocused on evaluating sites and prioritizing treatment of adverse effects, based upon their significance and risk of destruction. Additional inventory and site evaluation were completed by Texas A&M University (TAMU) in the summers of 1994 and 1995. Since then, KNF has conducted at least 50 inventories within the Project’s boundaries for its own projects.

1 Montana State Historical Society and SHPO may participate but has elected not to.
d. **FCRPS Era.** The CG has continued under the FCRPS Direct Funding Agreement program begun in 1997, meeting with increasing regularity to review and guide program progress. In 2006, the CG collaborated in preparing an updated HPMP, which was approved by Northwestern Division in 2007.

Condition monitoring of sites has continued since 1997. Numerous archaeological sites have been recorded and evaluated. Moreover, control points for measuring the loss of cut banks have been established in some areas, and field techniques, especially those for feature recordation, have been refined. Currently, about 30 sites are monitored during the year for adverse effects by operations, off road vehicle use, and looting. Enforcement of laws against unauthorized vehicle use and looting continues to be a challenge. The need for continued inventory and evaluation of sites became obvious during these monitoring efforts. Several notable sites have since been evaluated including Tobacco River (24LN190), Barron Creek (24LN580), Bristow Creek (24LN903/1052/1053), Dune (24LN704), and Alexander Creek (24LN1048).

In 2003 KNF and MTSHPO concurred in formal eligibility of sites as contributing (or not) to the MKRAD under Criterion D. Evaluation on other criteria (A-C) is slated for future action. Treatment of adverse Project effects has included data recovery, installation of ARPA warning signs, restricting potentially destructive recreational activity at select sites, and stabilization. Data recovery took place at Sophie’s Cabin (24LN521 (2000)), but field re-evaluation in the early 21st century showed that archaeological information at other sites recommended for treatment in the 1980s had since been lost to erosion (e.g., 24LN704). Since 2001 the Project has emphasized site stabilization to address adverse effects, including use of snow fences to forestall wind erosion, riprap to halt erosion at Alexander Creek (24LN1048) in 2000, and placement of riprap at the Barron Creek site (24LN580) in 2009.

CSKT Preservation Department Traditional Cultural Properties and Place Name Studies work from 1997 to 2002 took place under BPA and Corps contracts. Similar work will be continued to support evaluation of archaeological sites under criteria A-C.

3. **Notes on the Data.** Data for the tables in the annual report derive from several sources. The following discussion presents information about the data sources and their status and reliability. Data were taken insofar as possible from the Project’s HPMP approved in 2007, and except for accounts of achievements in the last 3 years, are statused as of December 2006 when the HPMP design was frozen. Volume 1, Section 4 contains most of the data, but some interpretation was required using Volume 2. It is important to note that the HPMP does not tabulate program achievements over the years by the various administrative eras; pre- and post-FCRPS data must be extracted and retailed from many places and sources within the HPMP.

a. **Project Areas.** Project area information is derived from GIS layers and project real estate data from the CAD files associated with the Corps REMIS database.

i). **Project Area (or APE, if affirmed).** The APE includes lands either directly or indirectly affected by operations at present or in the future where reasonably foreseeable. The APE includes any lands where Project operations and maintenance have a potential adverse effect, including Federal fee lands and other real property where the U.S. Government has a current and future legal interest, as well as non-Federal lands. The APE also includes lands in downstream reaches outside of Project boundaries where there is no current Federal ownership or legal interest, but where the Project has been determined to have potential adverse effects on historic properties. In the past, such potential has occurred on lands many miles downstream in the Bonners Ferry, Idaho area where shores were being eroded by water releases from operation at the Project. For the purposes of this report, the value used for the APE is that of the 300-foot buffered full-pool polygon, less the original
river surface area, rather than the full 72,000+ acres of the project's original real estate take for all purposes. The APE thus includes all submerged lands and the area around the reservoir being affected by pool operations.

ii). Project Real-Estate-Based APE Mapped. Yes; map includes all parcels as described above, but distant areas of potential effects (e.g., Bonners Ferry vicinity) are not included in the HPMP maps as their boundaries are not precisely known, and resulting maps would be at unusable scales.

b. Inventory Information.
   i). Archaeological Survey. Information on extent of archaeological survey is contained in geodatabase layers provided by georectification of scans of original field project maps or aerial photographs with information about surveyed areas in polygons or lines. BPA's GIS staff provided the rectifications and traced the surveyed area information into geodatabase features. Data are current as of July 2009; there may be additional survey coverage data from pre- and post-FCRPS periods in archives and if the data are found, they will be incorporated into future reports.

   Before FCRPS Program (a/o 1996). Most of the area is polygonal; standard may be 30 meters, or 100 feet (1976) or less (1980s); acreage was developed by using X-Tools scripts for table operations on the feature data set. The polyline portion (mostly Corps inhouse surveys) assumes 50' (15 meter) visually swept width; older reports may assume other figures up to twice that width. Length in feet was developed by using X-Tools scripts for table operations on the feature data set.

   FCRPS 1997-2009. Intervals for polygonal survey area not yet available. See above comment on polyline survey data -- many parts of this set are derived from GPS tracklog data. Assume 50' swept width. Most of the area in this data set is polyline.

      Total Sites before FCRPS Program (a/o 1996). The value in this cell derives from a spreadsheet used to analyze impacts of FCRPS operational alternatives during the 1990-1996 System Operation Review; the data were archived in 1996.

      Total Sites identified 1997-2009. The value in this cell is given by subtracting the current (status December 2006) site count presented in the Project's HPMP from the above pre-FCRPS site count.

   iii). Archaeological Site Evaluation Status. "Evaluation" includes any technique used to assess significance of a site under Criterion D; test excavation, bank scraping and minor feature retrieval and radiocarbon dating, surface collection, and recording of rock art all are included as evaluation actions.

   Sites before FCRPS Program (a/o 1996). The value in this cell is derived from information in the project's approved HPMP. Most of the site evaluation occurred in the mid-1980s. This cell also contains counts after 1996 derived from work by others or not funded by the FCRPS program.

   Sites Evaluated 1997-2009. See previous items.

   iv). National Register Status (Archaeological Sites). These data reflect cumulative outcomes of the National Register evaluation process as described in the HPMP (2007). Generally, the cells for NRHP Listed/Determined Eligible and NR Districts are easiest to fill as the category requires specific documentation. The data in them are most reliable. They also are the most important data for measuring program progress. Unevaluated Sites also is an important datum and progress measure. Far less reliable or precise are the other
categories, which often reflect a variety of opinions and sometimes are not well documented specifically. Most cultural resource managers are very reluctant to firmly declare sites ineligible/noncontributing as so frequently the ineligible or insignificant site of one era has become highly important in the next.

**NRHP Listed and/or Determined Eligible Sites (D).** Includes all listings and determination from all sources and management periods. Sites proposed for treatment of adverse effect usually have determinations in this category.

**NR Districts.** See above.

**Sites Determined Not Eligible or Non-contributing.** From HPMP tables 4-1 and 4-2.

**Sites Considered Eligible.** From HPMP tables 4-1 and 4-2.

**Sites Considered Not Eligible.** From HPMP tables 4-1 and 4-2.

**Unevaluated Sites.** This cell reports numbers of sites that either have received no evaluation effort or have not been evaluated sufficiently to support a recommendation. Unknown, buried, or unresolved designated values are summed in this cell.

**v). TCP Studies Status (Interim; all Management Phases).**

TCP Studies before FCRPS Program (a/o 1996). Only Federally-sponsored CRM-era studies are included.

TCP Studies under FCRPS 1997-2009. See above. CSKT efforts continuing since 1997 are counted as one study, but might be separated by contracting phase.

**c. Site Treatment or Mitigation.** This category reports actions taken to address adverse effect related to the Project. Deriving the values in this table required considerable searching through sections in the HPMP.

**i). Before FCRPS Program (a/o 1996).** This project has significant pre-FCRPS mitigation, largely carried out as archaeological data recovery in the 1970s (LAURD) and 1980s (Bristow).

**Sites Stabilized.** See Section 2.

**Data Recovery.** See Section 2.

**ii). FCRPS Program 1997-2009.** Action to address adverse project effects began as noted in Paragraph 2 above.

**Sites Stabilized.** See Section 2.

**Data Recovery.** May need to tally point-provenienced (GPS) surface collection of eroded assemblages at several sites in future reports.

**Visitor Center Displays.** Detail in HPMP Volume 2.

**Brochures.** No comment.

**CDs/DVDs.** At least one DVD has been prepared by CSKT with partial results of the TCP/Place Names Studies.

**Book.** No comment.

**Volunteer Projects.** No comment.
Other. ARPA warning signs have been placed at the Project's common access points.

d. Curation. The Project has used the second Corps-supported Tribal Archaeological Repository as the source of its curation since 1990. Curation of collections from the Project is funded annually by contract.

Artifacts (cu. ft.). The estimate is derived from figures in published reports and contract documents.

Records (linear ft.). See above. Offsite storage of duplicate records is necessary to meet current Federal repository guidelines, and will need to be programmed in the near future.

Permanent Repositories with Curation Agreements. This is the Repository of the Confederated Salish and Kootenai Tribes at the Salish and Kootenai College in Pablo, Montana.

Temporary Repositories or Permanent Repositories without Curation Agreements or Funding. Some materials from the Cascadia work at 3 sites are stored at contractor facilities and will remanded to the CSKT repository when that contract is completed.

4. Notable Achievements during the Reporting Period.
The Libby Dam/Lake Koocanusa project boasts a long cultural resource management history. Much work has been accomplished prior to, and since, implementation of the current program. As the purpose of this report is to illustrate accomplishments since the program's inception, this section presents highlights and milestones since FCRPS program implementation in 1997.

Sophie’s Cabin. Sophie Morigeau was a late-19th century trader and is a local legend. The former site of her cabin is a valuable resource and has been extensively affected by reservoir erosion and looting. In 1997 data recovery was conducted at the trading post. Data recovery excavations yielded important information about early trade in the region and paint a vivid picture of life in the late-19th century. Several presentations and publications have been produced from the data collected.

Alexander Creek. The Alexander Creek site is one of only two stratified sites below Libby Dam. It contains two components extending back at least 4,000 years and yielded a range of artifacts representing a long period of use and occupancy. Features recorded include storage pits excavated into Mazama volcanic ash and a cache of fishing-net weights. Moreover, the site has strong cultural association with the ethnographic period. It is a priority site for stabilization and protection. Data recovery excavations have been conducted at the site. The excavations yielded significant information about the region's prehistoric past. Analysis and interpretation of the data continues today. Bank stabilization to protect the recreation area has also resulted in protection for the site.

Kootenai Place Names Study. The CSKT identified 20 Kootenai Place Names associated with potential Traditional Cultural Properties within the Project. Each place name is documented with oral history, and archaeological and historic data. The work has provided a foundation for future work to evaluate traditional cultural places at the project and has been used to create a GIS database linking Kootenai Place Name data with geographic areas. Several large-scale maps illustrating place name regions and video of Elder interviews about the places.

CSKT Traditional Cultural Evaluations. A robust Traditional Cultural Place study is currently underway. The CSKT are conduct site tours and visits, elder interviews, and background research about Traditional Cultural Places in an effort to evaluate recorded archaeological sites under criteria A, B and C. The work continues today and will contribute greatly to the understanding of Kootenai culture.
KNF Monitoring Studies. Continuous monitoring of sites by the KNF has contributed greatly to the management of resources at the Project and the understanding of direct and indirect effects of project on these significant resources. Numerous reports have been produced through this work and continue to inform and guide program direction and goals. HPMP. A comprehensive HPMP was produced in 2006-2007 to document program history and highlight accomplishments and describe the future program elements, schedule, and goals. It has provided, and continues to provide, critical information necessary to successfully manage cultural resources at the project.


Destruction of archaeological significance at 24-LN-704 resulting from delay of planned mitigation (knowledge be power, mateys!). Note contribution by avifauna. View to east. Early 21st century.
CSKT field crew mapping sites for Criterion A/B eligibility assessment, Tobacco Plains, view to north.

KNF field crew monitoring erosion effects, Bristow Creek Area. View to northeast.
Barron Creek, eroding bank with felled trees. View to west.

Barron Creek, installing riprap, fall 2009. View to east.
6. Bibliography. The following bibliography includes all known references to cultural resources at the project from the beginning of archaeological investigations to the present date. The
references are separated by pre- or non-FCRPS program-funded efforts, and references for work funded under the FCRPS program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

a. FCRPS.

Ahr, Stephen W.

Bonnichsen, R. and C. Hedlund

Confederated Salish and Kootenai Tribal Preservation Department


Hemry, C.

Hodges, C.M.

Libby Dam/Lake Kooecanusa Cooperating Group

Pevney, Charlotte D.

Schalk, R., B. Herbel, and C. Hodges

Schalk, R., B. Herbel, and C. Hodges

Schalk, R., B. Herbel, M. Wolverton, C. Hodges, and D. Olson

Thoms, A.V., Editor

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Report No. 8 submitted to the U.S. Army Corps of Engineers, Seattle District, by the Center for Ecological Archaeology, Texas A&M University, College Station.

Timmons, Rebecca S.

Timmons, Rebecca S.

Timmons, R.S.

Timmons, R.S.

Timmons, R.S.

Timmons, R.S.

Timmons, R.S.

Timmons, R.S.

Timmons, R.S. and C. Ray

U.S. Army Corps of Engineers

U.S. Army Corps of Engineers

U.S. Army Corps of Engineers

U.S. Army Corps of Engineers

b. Pre- or Non-FCRPS.

Alldredge, K.

Alldredge, K.

Alldredge, K.

Bailey, A.

Baker, J.


Chance, D.


Chatters, J.C. and D.M. Leavell

Choquette, W. T.


Choquette, W.T., D.G. Rice, and R. Sprague

Collins, M.
CSKTPO (Confederated Salish and Kootenai Tribal Preservation Office).  

Driggers, H.G.  

Greiser, S.T.  

Hartmann, G.D.  
1986 Historic Properties Assessment of BPA’s Proposed Intertie Development and Use, Lake Roosevelt, Lake Pend Oreille, Lake Koocanusa, Dworshak Reservoir, and Hungry Horse Reservoir.  Eastern Washington University Reports in Archaeology and History 100-52, Eas

Hauge, K.  

Hauge, K. and D. Pry  

Hemry, C.  

Hemry, Cindy & Dennis Pry

Highness, D.

Jeffries, J.

Jermann, J.V. and S. Aaberg.

Journey, A.E.

Kroschel, Michael

Libby Dam/Lake Kooicanusa Cooperating Group
Light, T. and D. Hall
1993 Eureka-Fortine Buried Cable Project PS #27-522-14-93 and Lake Koocanusa Submarine Cable Crossing PS #27-522-14-04, Lincoln County, MT. Heritage Research Center, LTD., Missoula, Montana. Technical Report under contract to InterBel Telephone Cooperative,

Manning, C.J.

Matthew, K.

Merrell, C.L.

Miss C. J. (editor).

Munsell, D.A. and L.V. Salo

Pearl, F.B. and M.A. Jackson
1995 Cultural Resources Inventory of the 1994 Field School Projects: Eureka North Burn Project, Blocks B, D, E and O (south half). Cultural Resources Inventory for the U.S. Forest Service, Kootenai National Forest, Rexford Ranger District. Center for Environmental Archaeology, Texas A&M University. College Station.
1995 A Description and Initial Assessment of Seven Sites Along Lake Koocanusa Reservoir, Lincoln County, Montana. Technical Report for the U.S. Forest Service, Kootenai National Forest, Supervisor’s Office. Center for Environmental Archaeology, Texas A&M University. College Station.

Periman, R.D.

Pfeiffer, M.A.

Pry, Dennis.

Pry, D. and C. Hemry.
Rice, D.G.  

Roll, T.E.  

Roll, T. E. and M. B. Smith.  

Salo, L.V.  

Schalk, R.F.  


Shiner, J.  

Smith, A.H.  

Swan, T.  

Taylor, D.C.  

Thoms, A.V. (editor).  


Thoms, A.V. and G. Burtchard (editors).


Timmons, R.S.

Timmons, R.S. and M. Zweifel.

Tromly, S.

Turney-High, H.H.


U.S. Army Corps of Engineers.
Valentine, D.

Weiser, Andrea L.

Weiser, Andrea L.

White, M.J.

APPENDIX O
Grand Coulee Dam and Lake Roosevelt
Additional Narrative Information

1. Project Description

Grand Coulee Dam is located at RM 596.6 on the Columbia River. The associated reservoir (Lake Franklin D. Roosevelt) extends roughly 145 miles up the Columbia and also inundates the lower reach of tributary streams, including the Spokane and Kettle Rivers. The shoreline is about 520 miles long along the Columbia and the Spokane Rivers. The reservoir’s maximum pool elevation is 1290 feet amsl, and the minimum pool is 1208 feet amsl. Federal fee lands taken for the reservoir extend along the Columbia River from Grand Coulee Dam northward to River Mile (RM) 729.5, but examination of GIS-based contour maps indicate that the 1290 foot contour line crosses the river at RM 741, indicating that the reservoir pool backs water up to that point. The reservoir extends up the Spokane River to RM 29 and up the Kettle River to RM 10. In general, when creating the reservoir the Federal Government purchased fee title to lands for the reservoir extending up to the 1310 foot elevation, with the additional acreage above the high water pool taken to address anticipated shoreline erosion. The tailrace of the dam extends approximately 6.4 miles downstream to RM 590, below which the lands along the river are managed by the Corps of Engineers as part of the Chief Joseph Project. Project lands for Grand Coulee total 90,933 acres, including acreage that lies below minimum pool and is therefore inundated for the life of the reservoir. Typically the deepest drawdowns occur in the spring for flood control. But lesser pool fluctuations occur throughout the year for power generation, fish flow releases, irrigation, and other authorized purposes. The Project spans an area within five counties (Ferry, Stevens, Lincoln, Grant, and Okanogan Counties). The Colville Indian Reservation and the Spokane Indian Reservation lie along the reservoir shoreline. The Lake Roosevelt National Recreation Area overlies the Project lands around the pool area from the dam to RM 729.5. Land management of Project lands above the dam occurs under the terms of an administrative agreement signed in 1990. Under that agreement, the National Park Service (NPS) administers the Project lands around the reservoir excluding those lands within the boundaries of the Indian reservations and in an area immediately around the dam. The NPS is the Federal Land Manager for that administrative area for the purposes of NHPA, ARPA, and NAGPRA, and they also have control of archeological collections recovered from those lands after 1946. Under the 1990 administrative agreement, the Colville Confederated Tribes (CCT) and the Spokane Tribe of Indians (STI) are the managers of the Project fee lands within their respective reservation boundaries for all purposes. However, since the CCT and STI are not Federal entities, Reclamation retains control of archeological collections from those lands and is responsible for NAGPRA discoveries on those lands. Reclamation has retained direct management control of lands around Grand Coulee Dam needed for Project operation and maintenance, and manages the Project lands below the dam down to RM 590. However, activities on Reclamation-managed lands that are on the right bank, within the Colville Reservation boundaries, are coordinated with the CCT. Reclamation also retains the right to “make use of” all Project lands around the reservoir to carry out the purposes of the Columbia Basin Project. BPA markets and distributes the power produced at the Project.

2. Cultural Resource Management at the Project

a. Program management: In 1991, at the request of managers at Lake Roosevelt, a Cultural Resources Advisory Group was established to provide input and advice to those managers on cultural resource requirements and issues at the reservoir. Members were cultural resource staff from Reclamation, the CCT, the STI, and the Bureau of Indian Affairs (BIA). BPA was invited to participate after signature of the Intertie Development and Use (IDU) Programmatic Agreement (PA) in July 1991. This working group later became the Lake Roosevelt Cooperating Group, which now operates as two subgroups, the Mainstem and the Spokane Arm Cooperating Groups. The Washington Department of Archaeology and Historic Preservation (DAHP) is now a member of the Cooperating Groups, and BIA is no longer an active participant. Since 1992, Reclamation and BPA have implemented a cultural resources program (Program) of systematic investigations and management at the Project to meet IDU commitments as well as
commitments in the System Operation Review (SOR) Records of Decision (RODs). SOR commitments address Reclamation's and BPA's responsibilities for the effects of multi-purpose operations at 14 reservoirs. From 1992 through 1996 the Program was wholly funded by BPA to meet their commitments under the IDU PA. Since 1997, the Program has been jointly funded and administered by BPA and Reclamation to meet commitments in the SOR RODs. The NPS, CCT, STI, and DAHP are intensively involved through the Cooperating Groups in the planning and implementation of the annual investigations and in long-term planning. The NPS, CCT, and STI have also been the principal contractors for Program investigations completed under agreements or contracts with BPA.

b. Past Investigations: Below is a brief summary of principal past cultural resource investigations and management actions completed in and around the Lake Roosevelt pool and in the tailrace area below the dam. These are not limited to investigations under the IDU or SOR Programs.

1. Archeological and Historical Site Investigations: Very limited investigations were implemented prior to Project completion. Between 1939 and 1941, during construction of the dam and filling of the reservoir pool, limited salvage excavations were conducted at the initiative and expense of museum and educational institutions within the State (collectively called the Columbia Basin Archaeological Survey, or CBAS). CBAS surveyed selected areas and identified 39 sites, then completed test excavations or recovery at 33 of those locations where deposits yielded materials suitable for museum display. Most excavations targeted burial sites. A summary report was published (Collier, Hudson, and Ford). Resulting artifact collections and a large number of human remains were distributed between participating museums, but over time were consolidated at what is now the Northwest Museum of Arts and Culture (NMAC) in Spokane. NMAC and its predecessor institution have been working to meet the requirements of NAGPRA, and have repatriated remains and associated funerary objects to the STI and are in progress on repatriation to the CCT. Non-funerary materials are used for display and education purposes at the museum.

Between 1939 and 1940, Ball and Dodd Funeral Homes of Spokane were working at the reservoir under contract with Reclamation to recover interments from cemeteries for relocation to cemeteries above the pool. Ball and Dodd interpreted their relocation contract to also include removal of Indian burials from other locations pointed out to them by their workmen, many of whom were CCT and STI members. A reported 1,388 burials were removed by Ball and Dodd. From 1966 through 1978, Reclamation instituted a program of survey, test excavation, and data recovery in association with construction of the Third Power Plant at Grand Coulee Dam. Through the early 1970s the NPS administered the investigations, hiring Roderick Sprague as the principal investigator. With the exception of the burial recovery activities, David Chance directed and implemented the investigations and was responsible for report preparation. Chance recorded at least 172 sites along the Columbia River, on the Spokane River between the present confluence up to Little Falls Dam, and on the lower reaches of the Colville and Kettle Rivers. At least 16 sites were tested, and data recovery was conducted at both prehistoric and historic period sites in the Kettle Falls vicinity. Chance authored a series of reports that provide a foundation for more intensive studies of these same and other sites on-going today. One outcome of the studies was a culture chronology that is now being revisited using new data and perspectives. During this same time period, Sprague was recovering human remains exposed by reservoir operations and bank slumping. Collections from Chance’s investigations, as well as the human remains and associated funerary objects (AFOs) recovered by Sprague, were curated at Washington State University (WSU) and then the University of Idaho (U of I). In 2009, human remains and AFOs still extant in those collections were repatriated to the CCT by the NPS. The remaining non-NAGPRA collections are currently in Reclamation's custody and curated with the CCT.

From the end of Chance’s Third Power Plant investigations in the late 1970s until initiation of work in 1992 under the IDU PA, no systematic program for cultural resource management occurred at the reservoir. Small site-specific clearance surveys occurred as required by Section 106.

During the 1950 through 1980s, investigations were also occurring along the river below Grand Coulee Dam. In 1948 the Smithsonian River Basins Survey (RBS) conducted surveys along the north bank of the river in conjunction with the Corps plans for construction of Chief Joseph Dam.
Two sites were recorded in the area above RM 590. In 1950, the RBS returned and test excavations were completed at 45-OK-7, recovering archeological materials and human remains from graves previously disturbed by looters. Between 1969 and 1977 a series of surveys occurred around Lake Rufus Woods and into the Coulee Dam tailrace area in association with operational effects from construction of the Third Power Plant at Grand Coulee. At least 30 sites were recorded, and a number were tested. This included site 45-DO-189, where data recovery excavations were later implemented by Reclamation in 1986.

The IDU PA was signed in 1991 and BPA, in partnership with Reclamation and the NPS, with involvement of the CCT and the STI, began to plan and implement systematic investigations at the reservoir. Through 1994, the NPS took the lead in planning and contracting for investigations on BPA’s behalf. Work implemented under the contracts issued by the NPS included an historic overview and context for the reservoir (Galm and Luttrell 1996); and ethnographic overview for the CCT (Ackerman 1996); test excavations at 45ST23, recommended as eligible (King and Grieser 1994); and extensive surveys throughout the reservoir resulting in the documentation of 161 new sites (King and Grieser 1995; Hartzell et. al 1995; Morgan 1995).

After 1995, BPA began to directly implement the IDU investigative program, contracting with the STI and the CCT. In 1995 and 1996, principal accomplishments were further surveys on the Spokane Reservation shoreline (Hartzell et. al 1996) and Mainstem (Galm et. al 1996), with 20 new sites recorded by Galm.

In 1997, the FCRPS Cultural Resources Program began. BPA continued to take the contracting lead, with actions jointly funded and implemented by BPA and Reclamation. The nature of the investigations expanded at this point, with TCP studies becoming an integral part of the cultural resources identification and evaluation program. Briefly, accomplishments include survey and monitoring that resulted in the recordation of 66 additional sites; test excavation of 66 sites; salvage excavations at portions of 9 sites; and preparation of determination of eligibility/nomination forms for 6 sites (45-ST-49, ST-59, ST-65, ST-82, FE353, FE-355, and FE-497) recommended as eligible by contractors. These statistics are derived from the table included below from a draft HPMP for the reservoir. There could also have been additional small investigations not documented on that table as yet.

A multi-purpose monitoring program is also an important program element. Monitors collect information about current site integrity to support determinations of eligibility decisions; track bank erosion to understand on-going effects to sites; and increases the Federal and Tribal enforcement presence on the reservoir to reduce incidences of looting, vandalism, and unintended damage from recreational uses.

### Archeological Investigations in the Grand Coulee Dam Project Area from 1939-2007

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Year</th>
<th>Area of Work</th>
<th>Results</th>
<th>Work Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball and Dodd Funeral Homes of Spokane</td>
<td>1939-1940</td>
<td>Lake Roosevelt shoreline</td>
<td>Reinterred ~1388 burials from &gt;50 cemeteries</td>
<td>Burial /cemetery removal in preparation for reservoir filling</td>
</tr>
<tr>
<td>Columbia Basin Archaeological Survey (CBAS) (Krieger;Collier et. al.)</td>
<td>1939-1940</td>
<td>Lake Roosevelt shoreline</td>
<td>39 sites observed; 33 of the 39 were investigated</td>
<td>Survey; Testing; Excavation Focused primarily on burial sites</td>
</tr>
<tr>
<td>Smithsonian Institute River Basin Survey (Osborne; Osborne et. al.)</td>
<td>1948</td>
<td>Covered north bank only of Lake Rufus Woods</td>
<td>2 sites recorded in GCD tailrace (GCD downstream to RM 590)</td>
<td>Survey; conducted before the filling of Lake Rufus Woods</td>
</tr>
<tr>
<td>UW (Osborne et. al.)</td>
<td>1950</td>
<td>45OK7</td>
<td>Recorded housepits;</td>
<td>Testing</td>
</tr>
<tr>
<td>Removed Burials</td>
<td>Survey Conducted</td>
<td>Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc (see Galm et. al. 1994)</td>
<td>1962-1994</td>
<td>Lake Roosevelt</td>
<td>Not known</td>
<td>Surveys; Small undertaking surveys for compliance purposes</td>
</tr>
<tr>
<td>WSU (Larrabee and Kardas)</td>
<td>1966</td>
<td>Just below Little Falls Dam on Spokane Arm to Grand Coulee Dam, between 1290’-1310’ amsl. One site in tailrace – 45OK385</td>
<td>Formally documented 20 sites in Lake Roosevelt area and one site in the GCD tailrace.</td>
<td>Survey</td>
</tr>
<tr>
<td>Chance</td>
<td>1967</td>
<td>Right bank of Spokane arm up to Little Falls Dam. From confluence of the Spokane River and the Columbia River to the Canadian border. All between 1250’-1290’ amsl.</td>
<td>112 new sites discovered.</td>
<td>Survey. Limited to recording the most obvious sites.</td>
</tr>
<tr>
<td>WSU (Rice)</td>
<td>1968</td>
<td>Lake Roosevelt</td>
<td>10 sites from the ’67 Chance survey tested.</td>
<td>Testing</td>
</tr>
<tr>
<td>WSU (Ross)</td>
<td>1969</td>
<td>Lake Roosevelt</td>
<td>10 additional sites from 67 Chance survey, and 6 additional sites tested.</td>
<td>Testing</td>
</tr>
<tr>
<td>WSU (Leonhardt)</td>
<td>1969-1970</td>
<td>Right/north bank of Lake Rufus Woods; spot-checked the left bank.</td>
<td>2 sites in GCD tailrace recorded</td>
<td>Survey</td>
</tr>
<tr>
<td>Chance</td>
<td>1970</td>
<td>Lake Roosevelt</td>
<td>Recorded 25 new sites; many near Kettle Falls and in the northern half of the reservoir</td>
<td>Resurvey; only focused on portions of the reservoir</td>
</tr>
<tr>
<td>Uof I (Chance; Roderick)</td>
<td>1971-1978</td>
<td>Gifford Ferry; Pierre Campground; Kettle Falls; North of Kettle Falls</td>
<td>55 sites visited, but # tested not clear</td>
<td>Testing</td>
</tr>
<tr>
<td>Chance and Chance</td>
<td>1971, 1972, 1974, 1978</td>
<td>Vicinity of Kettle Falls; 45ST59, 45ST65;45ST28;45FE156;45ST207</td>
<td></td>
<td>Salvage Excavations</td>
</tr>
<tr>
<td>Brauner</td>
<td>1974</td>
<td>Spokane Arm</td>
<td>9 new sites recorded</td>
<td>Survey; related to a proposed Reclamation irrigation project</td>
</tr>
<tr>
<td>WSU (Bryant et. al.)</td>
<td>1975</td>
<td>GCD to Buckley Bar (RM590)</td>
<td>3 new sites recorded in GCD tailrace</td>
<td>Survey; for construction of 3rd powerhouse at GCD</td>
</tr>
<tr>
<td>WSU (Lyman)</td>
<td>1975</td>
<td>Lake Rufus Woods</td>
<td>0 new sites recorded in GCD tailrace</td>
<td>Revisit of previously recorded sites to determine site significance</td>
</tr>
<tr>
<td>Organization</td>
<td>Year Period</td>
<td>Location</td>
<td>Description</td>
<td>Method</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>WSU (Munsell; Munsell and Salo)</td>
<td>1975-1976</td>
<td>~57% of Lake Rufus Woods shoreline</td>
<td>1 new site recorded in GCD tailrace</td>
<td>Survey</td>
</tr>
<tr>
<td>Prolysts, Inc. (Bryant; Munsell and Salo)</td>
<td>1977</td>
<td>Lake Rufus Woods</td>
<td>3 sites tested in tailrace (45DO189, 45DO190, 45DO191) Housepits, recommended further investigations.</td>
<td>Testing</td>
</tr>
<tr>
<td>Misc. (see Galm et. al. 1994)</td>
<td>1977-1989</td>
<td>Spokane Arm and Rogers Bar</td>
<td>23 surveys completed (22- Spokane Arm and 1 on Rogers Bar). No new sites recorded</td>
<td>Survey, Mostly for mining interests.</td>
</tr>
<tr>
<td>McKie and Chance</td>
<td>1979</td>
<td>Lake Roosevelt</td>
<td>15 new sites recorded. 14 development areas surveyed.</td>
<td>Survey</td>
</tr>
<tr>
<td>HAER (Soderberg)</td>
<td>1979</td>
<td>Grand Coulee Bridge (45OK513)</td>
<td>1 new site recorded in GCD tailrace</td>
<td>Survey; WA State Bridge Inventory</td>
</tr>
<tr>
<td>Office of Public Archaeology (OPA) of UW (Leeds et. al.)</td>
<td>1980</td>
<td>GCD downstream to RM590</td>
<td>23 new sites recorded in GCD tailrace</td>
<td>Survey</td>
</tr>
<tr>
<td>CCT (Fredin)</td>
<td>1981</td>
<td>Lake Rufus Woods</td>
<td>1 new site recorded in GCD tailrace</td>
<td>Survey</td>
</tr>
<tr>
<td>Corps (Maas and Fredin)</td>
<td>1982</td>
<td>Lake Rufus Woods</td>
<td>2 new sites recorded in GCD tailrace; Tested 2 sites in GCD tailrace; 45DO439 and 45DO440. Cultural material recovered and additional testing recommended</td>
<td>Survey; Testing</td>
</tr>
<tr>
<td>Reclamation and Corps (Zontek, Munsell and Salo)</td>
<td>1982</td>
<td>Lake Rufus Woods</td>
<td>Tested 2 sites in GCD tailrace; 45DO394 has 3 distinct occupation zones; 45DO189 contains intact deposits outside housepit boundaries</td>
<td>Testing</td>
</tr>
<tr>
<td>CWU (Chatters)</td>
<td>1982</td>
<td>Lake Rufus Woods</td>
<td>4 sites tested in GCD tailrace;</td>
<td>Testing</td>
</tr>
</tbody>
</table>
substantial testing of 45DO189 revealed large amount of cultural material; 45DO394 contains small but useful artifact assemblage; 45DO479 yielded little cultural material; 45DO190/191 contains 3 occupation areas

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Site Description</th>
<th>Result/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPA of UW</td>
<td>1983</td>
<td>Peter Dam Pictographs</td>
<td>1 site in GCD revisited and updated</td>
</tr>
<tr>
<td>Reclamation (Zontek)</td>
<td>1986</td>
<td>Reclamation WA Flats Wildlife Area</td>
<td>3 new sites recorded in GCD tailrace</td>
</tr>
<tr>
<td>AHS (Galm and Lyman)</td>
<td>1986</td>
<td>Lake Rufus Woods</td>
<td>?? Data Recovery and Salvage</td>
</tr>
<tr>
<td>Reclamation (Stevens and Masten)</td>
<td>1988</td>
<td>Lake Rufus Woods</td>
<td>1 site tested in GCD tailrace; 45OK7 contain well preserved deposits of cultural material</td>
</tr>
<tr>
<td>AHS (Galm and Luttrell)</td>
<td>1988-1993</td>
<td>Lake Roosevelt</td>
<td>Burial Site Inspection Surveys</td>
</tr>
<tr>
<td>Chance and Chance</td>
<td>1990</td>
<td>Near mouth of Colville River</td>
<td>Tested one site (45ST201). Recommended it eligible to the NRHP</td>
</tr>
<tr>
<td>AHS (Fredin and Lyons; Morgan; Stevens)</td>
<td>1990-1993</td>
<td>Lake Roosevelt</td>
<td>Recorded 8 new sites Survey; Debris Removal Project</td>
</tr>
<tr>
<td>HRA (King and Greiser)</td>
<td>1994</td>
<td>45ST23</td>
<td>Deemed 45ST23 NHRHP eligible Evaluative Testing</td>
</tr>
<tr>
<td>HRA (King and Greiser)</td>
<td>1995</td>
<td>Between 1253' and 1290' amsl in these areas: West bank of RM690-729; East bank of RM629-790; Portions of Kettle River between its confluence with the Columbia and RM11 at Barstow; Colville River from confluence with Columbia to RM1; Hawk Creek from confluence with Columbia to ~3 miles upstream.</td>
<td>Recorded 160 sites and 79 isolated artifact clusters Survey</td>
</tr>
<tr>
<td>AHS (Morgan)</td>
<td>1995</td>
<td>Three areas of focus located on</td>
<td>1 new site Survey</td>
</tr>
<tr>
<td>Year</td>
<td>Agency</td>
<td>Area Description</td>
<td>Methods</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>------------------</td>
<td>---------</td>
</tr>
<tr>
<td>1995-1996</td>
<td>STI (Hartzell et al.)</td>
<td>Spokane Arm and between Hawk Creek and Hunters Creek on the Columbia</td>
<td>Survey</td>
</tr>
<tr>
<td>1996</td>
<td>AHS (Galm et. al.)</td>
<td>Between 1220’ and 1290’ amsl in the Lake Roosevelt drawdown zone on the mainstem (except for the left bank from Hunters Creek downstream to Hawk Creek): also surveyed the Kettle/Columbia River confluence to one mile upstream both banks of the Kettle River;</td>
<td>Survey</td>
</tr>
<tr>
<td>1997</td>
<td>AHS (Hartmann)</td>
<td>45FE156, 45FE159, 45ST34, 45ST41, 45ST45, 45ST59, 45ST63, 45ST102, 45ST103, 45ST201, 45ST411, 45ST414, 45ST419, 45ST423, H95-32, H95-35</td>
<td>Evaluative Testing</td>
</tr>
<tr>
<td>1997</td>
<td>AHS (Hartmann)</td>
<td>Focused below 1227’ amsl in the drawdown zone between GCD and the Canadian border, except the east bank between Hunters Creek and Hawk Creek.</td>
<td>Survey</td>
</tr>
<tr>
<td>1998</td>
<td>AAR (Wilt et. al.)</td>
<td>45ST63, 45ST55, 45ST61, 45ST59, 45ST123, 45ST179, 45ST66, Haag Cove site area</td>
<td>Evaluative Testing</td>
</tr>
<tr>
<td>1999</td>
<td>AAR (Roulette et. al.)</td>
<td>45ST63</td>
<td>Evaluative Testing</td>
</tr>
<tr>
<td>2000</td>
<td>AAR (Roulette)</td>
<td>All accessible areas between 1289’-1310’ amsl. 104 discrete survey areas on the banks of Lake Roosevelt were accessible. Includes portions of the Sanpoil, Kettle, and Colville Rivers and the tailrace terrace below GCD.</td>
<td>Survey</td>
</tr>
<tr>
<td>2000</td>
<td>AAR (Roulette)</td>
<td>West side of GCD tailrace, between 1240’-1000’ amsl</td>
<td>Survey; Testing</td>
</tr>
<tr>
<td>Organization</td>
<td>Year</td>
<td>Sites</td>
<td>Action</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>AAR (Roulette)</td>
<td>2000</td>
<td>45ST438, 45FE387, 45FE361, 45ST408, 45FE399</td>
<td></td>
</tr>
<tr>
<td>Juell et. al.</td>
<td>2001</td>
<td>Below 1235' amsl on the west bank of Columbia between the Nez Perce Creek and Spokane River (RM661-638.6)</td>
<td>Recorded 11 new sites</td>
</tr>
<tr>
<td>AAR (Roulette)</td>
<td>2001</td>
<td>45FE43, 45ST93, 45ST57, 45ST65, 45FE320, 45FE158, 45ST67, 45ST411, 45ST412, 45ST413, 45ST206, 45ST100/410, H95-068, 33-18, 45ST433, H95-134, H95-136, and 5 previously unrecorded sites</td>
<td>45ST206, 45FE320, 45ST57, 45ST411, 45ST413, 45ST65 deemed eligible for NRHP</td>
</tr>
<tr>
<td>AAR (Hamilton and Solimano)</td>
<td>2002</td>
<td>45ST65, 45ST61</td>
<td>45ST65, deemed eligible for NRHP listing</td>
</tr>
<tr>
<td>AAR (Hamilton and Solimano)</td>
<td>2002</td>
<td>45ST59, 45ST49</td>
<td>45ST59, 45ST49 deemed eligible for NRHP listing</td>
</tr>
<tr>
<td>AAR (Hamilton et. al.)</td>
<td>2003</td>
<td>45FE353, 45FE355, 45ST176, 45ST201, 45ST65, Colville Flats site area</td>
<td>45FE355, 45ST65, 45ST201 recommended eligible. DOEs completed for ST65, FE353, FE355</td>
</tr>
<tr>
<td>AAR (Hamilton et. al.)</td>
<td>2003</td>
<td>45ST82</td>
<td>45ST82 recommended for evaluative testing</td>
</tr>
<tr>
<td>CCT (Engseth)</td>
<td>2004</td>
<td>45ST82</td>
<td>Site recommended eligible, DOE completed</td>
</tr>
<tr>
<td>STI (Jones)</td>
<td>2005</td>
<td>Cayuse Cove</td>
<td>SIR-R4-0001 salvage of slumping bank</td>
</tr>
<tr>
<td>CCT (Weaver)</td>
<td>2005</td>
<td>FE497</td>
<td>Site recommended eligible, DOE completed</td>
</tr>
<tr>
<td>STI (Jones)</td>
<td>2006</td>
<td>45LI04/SIR-R2-0004, SIR-R2-0003, SIR-R7-0002</td>
<td>45LI04 recommended eligible, SIR-R2-0003 recommended for biannual monitoring, SIR-R7-0002 recommended for monitoring every 2 years</td>
</tr>
<tr>
<td>CCT (Pouley)</td>
<td>2006</td>
<td>45ST49, 45ST59</td>
<td>45ST49, 45ST59 recommended eligible (DOEs to</td>
</tr>
</tbody>
</table>
2. Traditional Cultural Properties: TCP investigations have been a significant element of the FCRPS Cultural Resources Program at Grand Coulee, with investigations conducted by the CCT and STI. A key accomplishment by the CCT has been updating a place names study completed by Bouchard and Kennedy in 1984 that had identified 408 named places within 1.5 miles of the reservoir high water line. The update completed by the CCT as part of the FCRPS program involved verification and correction of the earlier study results. It also resulted in the identification of more than 100 additional place names within the same study area. The update was completed in 2005 and continues to be revised as new information is discovered. The CCT are also developing and updating databases for historical photographs and oral histories, to be used to support both TCP and archeological investigations.

In 2005, the STI completed an ethnographic overview, which they update as new information is found. Preparation of this overview included extended interviews of 17 tribal elders to identify and record named places along the reservoir. More than 85 place names were documented on video and audio tape. These have been transcribed in both English and Salish (Spokane dialect) languages, and the data has been processed onto DVD as well as integrated into a GIS layer on the Lake Roosevelt GIS database. Additionally, in 2003 the STI began a program to translate and transcribe oral history tapes dating from circa 1930s through 1950s. About 400 hours of oral history interviews and other recordings on reel-to-reel tape have been transferred to a digital medium. A tribal elder is transcribing the recordings from Spokane Salish to type-written English records, which have been entered into a research database indexed by key works which allows searches of the transcribed materials. This database also stores audio, video, and written components of oral history interviews. Work continues annually on transcriptions and data entry into the database.

3. Burial Monitoring and Treatment: In 1988, Reclamation initiated a program of burial site monitoring that continues today. Reclamation also addressed repeated burial exposures at two cemetery sites, one on the Spokane Reservation near Coyote Spit, and the second at 45-FE-
38, near the Kettle Falls Bridge. Bank stabilization was not possible at the Coyote Spit location, and so Reclamation funded the STI to explore the cemetery and remove and relocate burials to the cemetery at Wellpinit. Geological conditions allowed Reclamation to install bank stabilization at FE-38. Prior to stabilization, test excavations were conducted to confirm that no general archeological deposits were present, and burials that were within the stabilization installation impact area were recovered. At present, Reclamation is completing engineering designs with the goal of installing bank stabilization at 45-FE-1, a location south of Kettle Falls Bridge where a number of burials have eroded from the banks since the 1970s. The stabilization will be installed in the near future using joint funding from Reclamation and BPA.

In 2005, Reclamation completed an inventory of NAGPRA materials in the collections created under Roderick Sprague’s burial recovery activities and David Chance’s archeological investigations at Lake Roosevelt (discussed earlier) and curated at WSU as of the inventory date. The NPS, CCT, and WSU assisted with the inventory. Since all inventoried materials had been recovered from sites within the NPS management area, Reclamation turned the materials and data over to the NPS who completed the repatriation to the CCT under NAGPRA. The repatriated remains were reinterred by the CCT in 2009.

c. Recorded properties and Evaluation Status: As of 2007 (the latest summary available), 605 archeological and historic properties have been recorded on Project lands at Lake Roosevelt, in the tailrace area, and in areas along the Columbia upstream of the reservoir that may be affected by some level of inundation. A site inventory and evaluation status database created in 1995 for SOR indicates that 338 sites had been identified as of that date, and that test excavations and evaluations of National Register eligibility had been completed for 24 of those 338 sites. The evaluated sites are all within the Kettle Falls and the Lake Rufus Woods National Register Districts. Investigations and even data recovery had also occurred at additional sites, particularly as part of WSU’s and Chance’s investigations in the 1960s and 1970s, but no record exists to document that any SHPO consultations occurred to determine eligibility.

Records tracking accomplishments for the period 1997 through 2009 are only partially complete, and so we are under reporting Program accomplishments for this period. Documented accomplishments indicate the following:

- 267 additional sites have been recorded
- concurrence has been reached in a consensus determination that 3 sites (45-ST-44, 45-ST-82, and 45-GR-146) are eligible to the National Register
- contractors have recommended 35 sites as eligible to the National Register or contributing to a proposed National Register district. These included 28 sites in an area recommended to be defined as the Kettle River Archeological District, plus 7 individual sites (45-FE-353; 45-FE-355; 45-ST-49; 45-ST-59; 45-ST-65; 45-ST-63; 45-LI-3). SHPO/THPO consultations have not yet occurred for these sites, although the CCT THPO has already indicated concurrence with an assessment that FE-353 and FE-355 are eligible to the National Register
- 2 sites have been recommended as not eligible to the National Register (45-LI-370 and 45-LI-372)

3. **The APE**
The APE is currently being defined in discussion with members of the two Cooperating Groups at this Project. Minimally, the APE will include lands within the exterior real estate take line for the Project. Lands for which fee title or easement was obtained for the Project extend from the dam up the Columbia to RM 729.5 and lie below the 1310 foot elevation; lands below the dam down to RM 590 affected by operation of the power plants; and some additional lands around the reservoir or downstream of the dam associated with recreation, slides, and other Project needs. The reservoir also extends up tributary rivers and streams, including the Spokane River to RM 29 and the Kettle River to RM 10. It is known that lands up to RM 741 along the Columbia were not taken for Project purposes and yet are directly affected by the reservoir. It is likely that additional
lands extending beyond areas of direct effect will be incorporated into the APE, either associated with direct operational effects or particularly for considering effects to TCPs.

4. Notes on the Data

a. **Project Area/APE = 90,933.2 acres**
This acreage is the acreage of the area withdrawn or acquired for Project purposes minus the acreage of the original river channel. This acreage includes lands that are below the minimum pool (below 1208) and so are permanently inundated. Additional areas outside of the boundaries of Federal lands are likely to be affected by the operation of the reservoir (be within the APE as ultimately defined), but the extent of this area has not been defined.

No accurate real estate boundary map is available for the Project. The Project acreage was defined using the following four data-sets:

1) Boundary of Reclamation managed lands:
   I:\GCPO Data Final\GCPO Map Server.mdb (accessed 3/15/2010)
   Data Type: Personal Geodatabase Feature Class
   Feature Dataset: Boundaries
   Feature Class: GCPO_bnd
   Projected Coordinate System: NAD_1983_UTM_Zone_11N

2) Boundary of the Lake Roosevelt National Recreation Area
   I:\GIS\correctedbndry\parkbndry2004.mdb (accessed 3/15/2010)
   Data Type: Personal Geodatabase Feature Class
   Feature Class: parkbnd2004_FeatureToPolygon
   Projected Coordinate System: NAD_1983_UTM_Zone_11N

3) Combined Boundaries of Federal Lands Withdrawn or Acquired for Grand Coulee Project
   I:\Archeology\Sean_GIS\GCD Property\Grand Coulee Federal Lands.shp
   Data Type: Shapefile Feature Class
   Projected Coordinate System: NAD_1983_UTM_Zone_11N
   Notes: This shapefile combines the two above datasets. Boundaries between overlapping polygons were erased. Acreage of Federal Lands, including water surface = 105,253.4 acres

4) Boundary of the Original Columbia River Before Grand Coulee Dam
   I:\Archeology\Sean_GIS\GCD Property\Original_River_Polygon.shp
   Data Type: Shapefile Feature Class
   Geometry Type: Polygon
   Projected Coordinate System: NAD_1983_UTM_Zone_11N
   Notes: Based on location of original Columbia River shown on USGS quad maps. Acreage of original river within Federal land boundaries = 14,320.2 acres
b. **Archeological Survey Data Notes**

**Acres Surveyed Prior to 1996:** No map-based information exists for areas surveyed in years prior to the IDU investigations. Report narratives indicate, and distribution of recorded sites confirm, that at least the right bank of the Spokane River was surveyed below Little Falls to the confluence, as well as at least selected areas of the left bank; much of the Kettle Falls area and the lower reaches of the Kettle and Colville Rivers were surveyed; and at least high probability areas near Inchelium were surveyed. However the standard of survey is unknown and is presumed to not meet current standards.

Reclamation and BPA are still reviewing survey reports from the IDU surveys to accurately assess acreage surveyed and define clear survey boundaries in a GIS map base. Surveys occurring in this 1994-1996 covered large areas of the drawdown zone (see the table of archeological investigations included above for general geographic descriptions of areas surveyed, and the depth within the pool of the survey, in these years).

**Acres Surveyed 1997-2009:** Since 2006, BPA and Reclamation have been collecting and entering survey and site data from into a GIS db intended to track and document past investigations. However this db is still incomplete for Grand Coulee investigations. The number of acres surveyed at Grand Coulee (13,146) is drawn from that database, but is known to be an under-representation of actual area surveyed. Additionally, systematic site monitoring occurs annually and often involves close-interval systematic surface survey of previously surveyed lands.

c. **Archeological Sites Recorded**

Count of sites recorded prior as of 1996 = 338. The count in this cell derives from a spreadsheet used to analyze impacts of FCRPS operational alternatives during the 1990-1996 System Operation Review; the data were archived in 1996. The Corps, Seattle District, provided the data to Reclamation as an Excel spreadsheet ("FCRPSsites1996.xls").

Count of sites as of 2009 = 605. Source of count in this cell derives from an ESRI shapefile (GIS layer) provided by BPA (2008 edition) labeled in Reclamation files as ("I:\Archeology\Sean_GIS\BPA_data"), and is based on count of sites with value “Lake Roosevelt” in the “Reservoir” field.

d. **Archeological Site Evaluation Status.**

Sites Evaluated before FCRPS Program (a/o 1996) = 24. This number simply incorporates the number of archeological properties contributing to the Kettle Falls Archaeological District (19), and the sites in the portion of the Lake Rufus Woods Archaeological District above RM 590 (5). It appears that no consultations occurred with SHPO/THPO in association with IDU investigations (1992-1996).

Sites Evaluated w/ FCRPS Funds (1997-2009) = 35. Source is the database files referenced above. This number does not include 3 additional sites that were evaluated using FCRPS funds and for which a consensus determination was completed.

and evaluation and consultation status information by Jason Jones, STI, on 3/15/2010

e. **National Register Evaluation Activities 1997-2009 (Archeological Sites)**

Total Number of Sites Recorded as of 2009 = 605

Sites Listed or Determined Eligible (criterion d) = 3 (45-ST-44, 45-ST-82, 45-GR-146)

Number of National Register Districts/Historic Landmarks = 2. The Kettle Falls Archaeological District (in its entirety), and portions of Lake Rufus Woods NR District above RM 590. Both Districts were defined prior to initiation of the FCRPS Project.
Sites Recommended As Eligible or Contributing = 35. This cell reports opinions by contractors where agencies have not yet made a determination in consultation with SHPO/THPO.

Sites Tested for Eligibility (criterion d) = 59 locations (estimated count). This number is an derived from the table of past investigations in the draft Lake Roosevelt HPMP, Vol 1, 9-30-07 version, page 14-22. It consists of 51 sites to which Smithsonian numbers had been assigned, plus 2 “areas” (Haag Cover and Colville Flats), and 6 locations with temporary numbers indicated (H95-068; H33-18; H95-134; H95-136; H95-32; H95-35). The data was collected for the HPMP through a review of files by a contractor. There is the potential that some reports were not included in the files review. Also, some reports were unclear, and numbers could simply not be estimated.

Sites Not Eligible or Non-contributing = 0

Sites Recommended Not Eligible = 2. The STI have identified 2 sites they recommend to be not eligible (45-LI-370; 45-LI-372). Source: letter dated 9/29/2009 from Jason Jones, STI, to Eric Petersen, BPA.

Sites Unevaluated (no determination or recommendation made) = 541. Number generated by subtracting the number of sites determined eligible (27), and the number for which recommendations have been made (35 eligible, 2 not eligible), from the number of recorded sites (605). A number of these sites have been the subject of test excavations but either the contractor made no recommendation, or further investigation is needed, or the Agencies are considering recommendations.

f. TCP Studies Status (Interim; all Management Phases).

TCP Studies before FCRPS Program (a/o 1996). Bouchard and Kennedy completed place names studies for Lake Roosevelt and its immediate area as well as several other general ethnographic studies. Dr. John Ross conducted primary interviews and field visits with Spokane elders as part of personal research. The NPS contracted with Dr. A.L. Ackerman for an ethnographic overview of the CCT areas of Lake Roosevelt as part of the IDU investigations.

TCP Studies under FCRPS 1997-2009. Both the STI and CCT have been funded to implement on-going ethnographic research to support the identification of TCPs and archeological properties. The results to date are briefly outlined above under “Past Investigations” “TCP” subsection. The information presented there is drawn from the draft HPMP for Lake Roosevelt (2007).

g. Site Treatment or Mitigation

Before FCRPS Program (a/o 1996).

Sites Stabilized. 45-FE-38, a cemetery site near Kettle Falls Bridge, completed by Reclamation in coordination and consultations with the CCT.

Data Recovery. Data recovery prior to FCRPS primarily occurred during David Chance’s investigations in the 1970s.

FCRPS Program 1997-2009

Sites Stabilized. Engineering designs have been completed by Reclamation to stabilize 45-FE-1. This work, however, is not funded under the FCRPS Program, but instead has been funded by Reclamation funds only. It is anticipated that the stabilization will be implemented in 2012, and it will be jointly funded by BPA under the FCRPS Program.
Data Recovery. Salvage work, sometimes characterized as “salvage testing” has occurred at 9 sites since 1997. This included data recovery completed under a research design at the Deadhorse Site (45-FE-63). See information from the draft HPMP (2007), in the table included above under “Past Investigations.”

Visitor Center Displays. None

Brochures.

CDs/DVDs. Four public information DVDs have been created for Grand Coulee.

Book. “Book of Legends” was prepared by the CCT under FCRPS contract. This presents legends of the Upper Columbia area, and is written for children’s education and enjoyment.

Other. Installation of ARPA signs at key points of access to the shoreline and other locations of particularly public use and resource sensitivity.

h. Curation

Non-FCRPS. Beginning in 1995, Reclamation funded the University of Idaho and then the CCT to complete collections management actions and cataloging of the archeological collections created by archaeological investigations at Lake Roosevelt in the 1960s through 1970s (often called the Kettle Falls Collection). In 2008-2009, Reclamation funded the CCT to completed cataloging of collections recovered from 45-DO-189 in the tailrace area. These collections are curated by Reclamation at the Colville Tribal Repository under the terms of a curation agreement between Reclamation and the CCT.

FCRPS: Collections recovered under BPA contracts in association with both IDU and SOR investigations are presently curated with the CCT and STI. Collections management agreements remain to be executed by NPS and Reclamation for long-term curation of the FCRPS collections.

Artifacts (cu. ft.). Reclamation curates with the CCT 109,048 catalog items (286 cubic ft) of archeological materials and samples, plus 11,853 (approximately 7.5 linear ft) of associated records from the Kettle Falls Collection and from 45-DO-189. These collections were made prior to FCRPS as part of Reclamation’s NHPA compliance work.

Records (linear ft.). see above

Permanent Repositories with Curation Agreements. See introduction to this section.

Temporary Repositories or Permanent Repositories without Curation Agreements or Funding. Although Reclamation has a curation agreement with the Colville Tribal Repository, the FCRPS collections from lands under Reclamation’s management have not yet been officially moved under that agreement. Reclamation does not yet have an agreement with the Spokane Tribal Repository, but anticipates executing one prior to the end of FY 2011. FCRPS collections from the lands managed by the NPS are under the control of the NPS. Beyond the terms of annual ARPA permits, Reclamation and BPA do not yet have an agreement with the NPS about collections from the NPS management area. NPS would be responsible for selecting repositories and executing curation agreements for the FCRPS collections that they control.

4. Notable Achievements during the Reporting Period. See above.

5. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.
a. FCRPS

Arneson, K.  
2000 Archaeological Investigations and ARPA Damage Assessment at Mill Creek Delta Area, STI Site 96-1-04/16-03, Lake Roosevelt National Recreation Area. Spokane Tribal historic Preservation Office Anthropological Reports, No. 00-ARPA-001.  
2002 Cultural Resource Activities for Lake Roosevelt and its Operations as it affects the Spokane Indian Reservation and Homelands. AHS  
2002 Cultural Resource Activities for Lake Roosevelt and its Operations as it affects the Spokane Indian Reservation and Homelands. STI  
2003 Spokane Treasured Collections Management Plan (Draft). AAR  
2004 Fiscal Year 2003 Annual Report to the Bonneville Power Administration and the United States Bureau of Reclamation for Contract Number 0001157. AAR  
2005 Ethnographic Overview. Spokane Tribe of Indians Cultural Preservation Office. (Confidential)  
2005 Fiscal Year 2004 Annual Report to the Bonneville Power Administration and the United States Bureau of Reclamation - Volume II - Reworked Site Reports, Addendums. CCT  
2006 Salvage Archaeological Investigations at SIR-R4-0001, Cayuse Cove, Lincoln County, Washington. NWAA  
Bonneville Power Administration and Bureau of Reclamation  
2003 Memorandum of Agreement between the Bureau of Reclamation and Bonneville Power Administration for Mutually Agreed Upon Historic Properties Investigations at Lake Roosevelt and Hungry Horse Reservoirs.  
Bonneville Power Administration, Bureau of Reclamation, and US Army Corps of Engineers  
Boswell, S.A. (Partners in History) and Northwest Archaeological Associates, Inc.  
2000 Historic Context for Allotments and Homesteads in the Grand Coulee Dam Project Area, Volume I. Prepared for the Confederated Tribes of the Colville Reservation History and Archaeology Department.  
Brunson, Tiffany  
2007 Vegetative Bank Stabilization at 45ST82. Prepared for Bonneville Power Administration and Bureau of Reclamation, Contract No. 25057.  
Brunson, Tiffany and Ray DePuydt  
Brunson, Tiffany, and Lacey Culpepper  
Brunson, Tiffany, Ray DePuydt, and Jon Edwards

Confederated Tribes of the Colville Reservation
2004 Kettle Falls Fishery. Interpretive DVD. Confederated Tribes of the Colville Reservation, History and Archaeology Department. Prepared for the Bonneville Power Administration and U.S. Bureau of Reclamation, Pacific Northwest Region.
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1. **Project Description** Hungry Horse Dam and Reservoir (hereafter called the Hungry Horse Project, or Project) is located in northwest Montana on the South Fork of the Flathead River approximately 20 miles northeast of Kalispell. It is within the boundaries of the Flathead National Forest (FNF). The reservoir is 36 miles long with about 100 miles of shoreline and covers 23,813 acres of land. The lake’s maximum pool elevation is 3,560 feet above mean sea level (amsl) and its minimum operating pool elevation is 3,336 feet amsl. Typically, the reservoir is drawn down in early fall through March or April for power generation during winter peak periods of demand and to provide space for flood control. Fisheries releases occur in the summer and fall. In most of the last 10 years, the deepest drawdown has been about 100 feet below maximum pool. The reservoir generally refills by the end of July.

Land management is accomplished under the terms of a management agreement between the U.S. Forest Service (USFS) and Reclamation. The FNF was created in 1891. Reclamation received authorization to construct Hungry Horse Project in 1944. In 1947 they withdrew lands needed for the Hungry Horse Project from the FNF, but underlying title to those lands remained with the USFS. Reclamation and USFS signed a management agreement in 1948, updated in 1969, that defined the management responsibilities of the two agencies on Project lands. Reclamation is responsible for operating the dam and powerplant and managing the Project’s physical assets, while the USFS manages the lands and recreation. The USFS is the Federal Land Manager for the purposes of the Archeological Resources Protection Act, and is the Federal entity with control of archeological collections from the lands. BPA markets and distributes the power produced at the Project.

In 1855, The Confederated Salish and Kootenai Tribes (CSKT) ceded the lands within the FNF and affected by the Project. The CSKT retain cultural and historical ties to those lands, and also have reserved rights under their treaty to hunt, fish, and gather from unoccupied Federal lands.

2. **Cultural Resource Management at the Project**

   **Program management:** In 1991, BPA signed and Reclamation concurred to the Intertie Development and Use (IDU) Programmatic Agreement (PA), under which BPA would address the effects of hydropower operations on historic properties at five reservoirs. In 1992, in preparation for implementation of IDU investigations at Hungry Horse, Reclamation and the USFS signed an agreement designating the FNF as the lead in representing the land management interests at the Project. Reclamation also requested that BPA take the lead for obtaining cultural resources investigation services at Hungry Horse, although both agencies would jointly scope and decide upon program priorities. BPA agreed. As a final preparatory step, in 1994, BPA and Reclamation established a work group involving those agencies, the USFS, and CSKT. This group later became the Hungry Horse Project Cooperating Group.

   Since 1994, Reclamation and BPA have implemented a program of systematic investigations and management at the Project to meet IDU commitments as well as commitments in the System Operation Review (SOR) Records of Decision (RODs). SOR commitments address Reclamation’s and BPA’s responsibilities for the effects of multi-purpose operations at 14 reservoirs. The program at Hungry Horse Project is implemented as a joint program between the USFS, Reclamation, and BPA, and in cooperation with the CSKT. From 1994 through 1997 the program was wholly funded by BPA to meet their commitments under the IDU PA. After 1997, the program has been funded by BPA and Reclamation to meet commitments in the SOR RODs. Investigations have been completed by the USFS and the CSKT under agreements or contracts with BPA.
**Past Investigations:** See the Hungry Horse Historic Property Management Plan (2005) for a more detailed account of past investigations to that date. Briefly, in 1947, prior to construction of Hungry Horse Dam, the Smithsonian River Basin Survey surveyed a few selected locations within the future inundation area. They located a single small prehistoric archeological site (24FH1). In the 1980s, the USFS completed reconnaissance surveys of portions of the reservoir shoreline but added little new information.

In 1994, under the IDU program, USFS began archeological surveys of selected portions of the pool. A baseline data collection conducted for SOR documents that 6 sites had been recorded at the reservoir by the time of that study in 1995. The USFS continued surveys conducted through 1997, and during that time they also conducted subsurface test excavations at all recorded sites except FH1. FH1 had not been relocated and was presumed to be permanently inundated. Survey occurred in all areas near streams and on landforms of less than 30% slope and not covered with thick layers of reservoir-deposited sediments. Areas of greater than 30% slope were not surveyed because many were eroded to basal soils, were unsafe, and/or were areas of very low site probability. By mutual agreement, the CSKT worked with the USFS in implementing the survey and test excavations, initially as trainees and then as crew.

In 1996, the USFS initiated a program of site monitoring, and in 1997 integrated erosion and artifact movement studies as part of the monitoring activities. Since 2003, FNF and CSKT have coordinated efforts. Three additional sites were recorded during monitoring activities in 2007 and 2008. Monitoring occurs each May at nine archeological sites within the reservoir pool and near recreation areas. Staff check for erosion damage and evidence of recreational impacts. There are also efforts to monitor during recreational peak use times and make the Federal presence more visible to the public. Additionally, FNF Heritage program personnel have accompanied Forest law enforcement officers and District recreational personnel on trips to the reservoir to familiarize them with the location and character of archeological sites so that they can assist with monitoring efforts.

Between 1996 and 2000, the USFS subcontracted for palynology, geochronology, GPS, GIS, ground penetrating radar (GPR), geomorphology, and soils studies. These are further discussed under the “highlights” section. In 2006, the USFS and CSKT signed a curation agreement under which archeological materials recovered as part of program investigations are curated at the CSKT’s People’s Center.

Starting in 1998 and continuing today, the CSKT have been conducting a traditional use study of the reservoir and its environs. Methods used include literature search in the tribal repository and elsewhere, and primary oral history interviews with elders, including field tours and studies. The study originally focused on identifying TCPs and traditional uses of the immediate reservoir area by Salish, Pend d’Oreille, and Kootenai people. More recently, an expanded study area has been identified to allow limited research outside of the Project area of the trail systems that pass through the Project and have segments affected by the reservoir. Research activities in this expanded study area are limited to records review and oral history interviews to identify known sites and purposes for which the area was used. The traditional use study also supports the archeology program by collecting information that places recorded archeological sites in a cultural and tribal land use context. All data resulting from the study is entered into a GIS mapping system with linked non-map data layers.

**Recorded properties:** As of 2010, 21 sites have been recorded within the pool and on the margins of the reservoir. Sixteen sites have been probed or test excavated; FH1 and the three sites discovered while monitoring have not had subsurface investigations. Recorded sites represent prehistoric and historic periods, some with components from both. Age ranges from late Paleo-Indian (c. 10,000-7500 B.P.) as determined by projectile point form, to 1953, when the reservoir first filled. All but two of the sites are lithics scatters, and the remaining two are lithics scatters with at least one pit feature.
In addition to the archeological sites, surveys, traditional use studies, and historical documents research have identified a regionally important system of trails connecting the Flathead Lake area to other areas in western Montana, principally the Glacier Peak area. To date, four major trail systems have been identified representing tribal travel routes. Historic-era trapper and USFS trails overlay the prehistoric trails in places. The trails are in variable condition. Portions, such as crossings, were totally inundated by the reservoir, but tread is still visible upslope of the current shoreline, and identified segments outside of the Project area within the FNF retain integrity. A National Register nomination for a multiple property district has been forwarded by the USFS (as Federal Land Manager) to the Montana SHPO for consultation on eligibility. The MPD nomination, called the "Indigenous Transportation Network and Associated Properties," identifies four trail districts: the Quintonken Trail Corridor and Quintonken Crossing; the South Fork Flathead River Trail; the Aeneas-Logan Trail and Elk Park Crossing; and the Soldier Creek Trail and Crossover Crossing. The Districts incorporate trail segments and associated properties within the area of operations effects by the reservoir as well as beyond. Detailed mapping of traditional cultural properties is on-going and major travel routes and related occupations sites and river crossings have been codified within the Project GIS.

Highlights: Program accomplishment highlights, in addition to the trail district research and nomination outlined above, are:

In support of archeological investigations, USFS conducted two geoarchaeological studies of the reservoir area (Eckerle 2000, 2001; Chatters 1996). The studies track paleoclimatic changes over time associated with the transition from Pleistocene or Ice Age steppe climates and vegetation regimes to Holocene conifer forests and wetlands. The study data show intriguing shifts in fire severity and frequency that may be associated with human occupation and intentional use of fire for range management purposes beginning about 8,000 years ago. The geoarchaeological studies provide climate and environmental contexts for investigations. These data are particularly useful when seeking to understand shallow sites in degraded areas, such as those found in a reservoir drawdown zone, where there is little likelihood of finding intact sediments and uncontaminated organic materials to aid in understanding past subsistence practices.

In 1999 the USFS sub-contracted with CH2M Hill to evaluate the effectiveness of GPR at Hungry Horse Reservoir. The primary goal was to determine if this would be an effective, non-invasive, technique for identifying the location or assessing the condition of archeological sites at the reservoir, as measured by three criteria. The criteria were applied at five locations selected to represent a variety of geologic conditions. GPR was found to be very ineffective in locations with abundant gravel and cobble stratigraphy, and only marginally useful for mapping facies changes and subsurface geology in locations with relatively homogenous soil consisting of sand and/or silt. It was concluded that GPR would not be effective for mapping lithic scatters but might be useful for mapping features such as fire hearths and living surfaces.

Between 2000-2004, a study was developed and implemented to monitor and document artifact movement on the reservoir. Monitoring occurred using the FNF cadastral personnel and equipment. After four years of monitoring, the data indicate that little artifact movement is occurring within the drawdown zone of the reservoir (McGuire and Light 2003).

3. The APE at Hungry Horse is lands taken for Hungry Horse Project purposes and lands where a direct or indirect effect from Project operations can be reasonably foreseen. The APE includes lands in downstream reaches outside of Project boundaries where there is no current Federal ownership or legal interest, but where adverse effects occurring to historic properties are a result of the Federal undertaking. Historic operating limits for Hungry Horse Reservoir are between 3,336 and 3,560 feet above mean sea level (amsl).

Currently, direct physical impacts of Hungry Horse Reservoir affect primarily those lands taken by Reclamation for construction and operation of the dam and reservoir. This includes shoreline
elevations between 3,336 and 3,560 feet amsl, from the dam upstream to the wild and scenic river designation boundary for the South Fork of the Flathead River, on the USGS 7.5" topographic map. Other as yet undetermined locations may be physically affected by reservoir operations. Examples of direct effect may include soil erosion, stripping of sediments, undercutting of riverbanks, massive slope failure, and loss of access due to inundation. Management of archeological sites to date has been conducted largely in the area of direct effects. Examples of indirect effects to the character or use of historic properties may include camping, off-road vehicle (ORV) use, and construction and maintenance of recreation facilities. Cumulative effects are associated with increased use of the area for recreation, and the continued degradation of sites within the operational zone of the reservoir from pool fluctuations and intermittent exposure.


**Project Area/APE = 22,260.7 acres**

This may not include the entire APE. This acreage is based on the acreage of the area inundated by the reservoir minus the acreage of the original river. It includes, therefore, lands below the minimum pool elevation that will not be exposed for access during the lifetime of the dam. Additional areas outside of the reservoir pool are likely to be affected by the operation of the reservoir, but the extent of this area has not been well defined.

Supporting GIS Data for the Boundary of Lands Inundated by Hungry Horse Reservoir was determined using two files as discussed below:

- **I:\Archeology\Sean_GIS\Bonneville\3500_3560 contour.shp**
  Data Type: Shapefile Feature Class
  Geometry Type: Line
  Projected Coordinate System: NAD_1927_UTM_Zone_12N

  Note: This shapefile was provided to Reclamation on a CD dated 2005 that was prepared by Ethnoscience, Inc., under contract to BPA. The 3560 polyline feature was selected as the edge of the inundated area, as this is the maximum elevation of the pool. The polyline feature was turned into a polygon feature using XTools 5.3 to allow for the calculation of acreage inundated. The original data for the location of the 3560 contour line appears to have been based on USGS 7.5 minute quadrangle maps covering Hungry Horse Reservoir.

  Note: Acreage of inundated area = 23,884.3 acres

**Boundary of the Original South Fork River before Construction of Hungry Horse Dam**

- **I:\Archeology\Sean_GIS\HH Topog\SeanHess\hhStreamsdgn.shp**
  Data Type: Shapefile Feature Class
  Geometry Type: Line
  Projected Coordinate System: NAD_1927_UTM_Zone_12N

  Note: This shapefile shows pre-reservoir streams at the hungry Horse reservoir taken from dgn files (a computer aided design [CAD] file format) provided by the Flathead National Forest around 2001. The polyline feature was turned into a polygon feature using XTools 5.3 to allow for the calculation of acreage.
Acreage of area inundated by the original river = 1657.9 acres

No accurate real estate boundary map is available for the Project. The Project's HPMP uses a provisional APE map comprised of polygons developed as defined above.

b. Archeological Survey Data Notes

Acres Surveyed Prior to 1996: no exact acreage can be reliably identified. Surveys occurred under the IDU contracts, as outlined above under “Past Investigations.”

Acres Surveyed 1997-2009: Data from FY 2009 BPA GIS.

c. Archeological Sites Recorded


Count of sites as of 2009 = 21. Source of data: ESRI shapefile (GIS layer) provided by BPA (2008 edition); “I:\Archeology\Sean_GIS\BPA_data,” count of sites with value “Hungry Horse” in the “Reservoir” field; March 2010 e-mail verification from Tim Light that no sites had been recorded since the 2008 GIS data provided by BPA.

d. Archeological Site Evaluation Status.

Sites Evaluated before FCRPS Program (a/o 1996). = 0. Source: the “FCRPSsites1996.xls” data provided by the Corps and the Project HPMP.

Sites Evaluated w/ FCRPS Funds (1997-2009). = 0. National Register nominations were forwarded to the MT SHPO late in 2009 requesting concurrence for a multiple property designation involving 4 Districts that include 14 recorded sites. USFS forwarded the nominations, and has not yet received a response from the SHPO. Tim Light, Flathead National Forest Archeologist, confirmed current status of consultation in a March 2010 e-mail.


Date source: 2005 HPMP, updated or confirmed in the March 2010 e-mail from Tim Light.

Total Number of Sites Recorded as of 2009 = 21.

Sites Listed or Determined Eligible (criterion d) = 0. Consultations are in progress with SHPO that would determine 14 sites as eligible or contributing to 4 Districts.

Number of National Register Districts/Historic Landmarks = 0. Consultations are in progress with SHPO for 4 Districts.

Sites Recommended As Eligible or Contributing = 14. See “Sites Evaluated.”

Sites Tested for Eligibility (criterion d) = 17. Source, 2005 HPMP and information provided by Tim Light in March 2010 e-mail.

Sites Not Eligible or Non-contributing = 0.

Sites Recommended Not Eligible = 0. The USFS originally recommended a number of sites as “not eligible” under criterion d after completing test excavations/probing. However, these recommendations have been pulled back pending reassessment within the trails context.

Sites Unevaluated (no determination or recommendation made) = 7. Number generated by subtracting the numbers of sites included in the District nominations (14 total) from the number of recorded sites (21).

f. TCP Studies Status (Interim; all Management Phases)

TCP Studies before FCRPS Program (a/o 1996) = 0. No such studies had occurred.

g. Site Treatment or Mitigation

CDs/DVDs = 1. Account of a CSKT member’s experiences working on the construction of Hungry Horse Dam.

Other = See Narrative of prior investigations and highlights above.

h. Curation

Artifacts (cu. ft.) Data on file with the Flathead National Forest

Records (linear ft.) same as above.

Permanent Repositories with Curation Agreements = 1. CSKT “People’s Center.” See introduction to this section. Curation agreement signed between the FNF and CSKT in 2006.

4. Notable Achievements during the Reporting Period. see “Highlights” above

5. Bibliography. The following bibliography includes all known references to cultural resources at the Project from the beginning of archaeological investigations to the present dat. The references are separated by pre- or non-FCRPS Program funded efforts, and references for work funded under the FCRPS Program since 1997. Future reports will include only increments or corrections to entries presented herein, for either category.

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