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**Attachment A:** Bold Peak Archaeological Services, Records Search Report
Introduction

In February, 2008 the City and Borough of Sitka (“City”) received a Preliminary Permit (“Permit”) for the Takatz Lake Hydroelectric Project (FERC No. 13234, “Project”) from the Federal Energy Regulatory Commission (FERC) in Washington D.C. The Project is located on Baranof Island, approximately 18 miles NW of Sitka, Alaska, USGS Quadrangle Sitka A-3. The Project would affect Takatz Lake, Takatz Creek, and Baranof Lake and River.

The Federal Energy Regulatory Commission (FERC) requires compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA). The Act requires federal agencies to protect or mitigate for the loss of archaeological, historical or cultural properties that are eligible for listing on the National Register of Historic Places.

The City implement an archaeological survey in 2010 within the Area of Potential Effect (APE) to document the presence of historic properties potentially affected in order to provide baseline data on which to evaluate Project related impacts (Figure 1). Project fieldwork began on October 2nd and was terminated early because bad weather made it impossible to complete the entire survey safely. The following report describes the progress made in 2010.

Notice of Confidentiality

The location information of archaeological sites and other cultural resources is confidential as provided under provisions of the Archaeological Resources Protection Act, the National Historic Preservation Act, and other federal, state, and local laws. Disclosure of such information is exempt from requests under federal and state freedom of information laws. The locations of cultural resources given in this report are provided to facilitate environmental and engineering planning efforts only. This report is not a public document, and is intended for release only to the Alaska State Historic Preservation Officer, federal agencies, land owners, and other appropriate permitting agencies.

Project Itinerary

Departed Wrangell 10/2/2010 aboard the M/V Lady Ferrell with Greg Scheff (captain, professional land surveyor), Ed Baxter (professional archaeologist), Steve Usrey (crew), and Paul Rushmore (principal investigator) onboard. Passed through Stikine Strait, Wrangell Narrows, Fredrick Sound, and Chatham Strait; arriving Takatz Bay at 9:30 pm (Figure 2). The first of three gales arrived with 70 mph wind the night of 10/2 and did not let up until the afternoon of 10/3. The weather was cool and rainy, punctuated by moments of intermittent
sunshine. With all the rain, both large and small drainages were at high flow and difficult to negotiate at times.

Off-loaded the skiff (10/3) and began the field survey, starting with the flats because of the tide schedule. There were times where high winds restricted safe access to the woods due to potential blow-down and falling rock. Field survey continued through 10/8 when we were forced to leave because of deteriorating weather and predicted gale winds. We made it to Murder Cove on the south end of Admiralty Island where we stayed for several days waiting for the storms to pass. The crew arrived back to Wrangell on 10/11.

**Background Research**

**Geomorphology**

The following summary is hypothetical, based on data drawn from others’ research around Southeast Alaska and applied to the Takatz Bay area. This will be further expanded in the 2011 report.

The geomorphology is the result of over 400 million years of volcanic activity and plate tectonics: 50 million years of mountain building, and thousands of years of massive glaciations; followed by isostatic rebound, erosion and re-deposition of glacial deposits. As a result, the accreted geology can vary east to west across Baranof Island, though the Project area is primarily quartz diorite which is part of a large granitic pluton that underlies Baranof Warm Springs and thought to have been emplaced during the late Eocene (@40 million years) (Callahan 1970). The soils, vegetation, and animal life in this region began to develop around 15,000 years ago when the ice sheet retreated onto the mainland (Viens 2001).

The Takatz Creek watershed that feeds into Takatz Bay is a deep glacial trough that was covered by the Cordilleran Ice Sheet several times during the Pleistocene (Claque 1989; Denton and Hughes 1981). At the peak of the last glaciation (23,000-17,000 years ago) the mountains in Figure 3 would have been covered in 3000ft of ice that extended west across Baranof Island to the continental shelf (Hamilton 1994; Mann 1986). Deglaciation was somewhat synchronous along the northwest coast of North America, with retreat from the shelf starting around ca. 17,000-16,000 years ago (Viens 2001) and proceeded to uncover Takatz Bay probably by 15,000 to 14,000 years ago. The mountains on Mitkof Island are thought to have been ice-free by 11,300 years ago based on Cosmogenic 36C1 surface-exposure dating (Briner and Swanson 2001; Swanson and Caffee 2001); the same may be true for the mountain alpine around Takatz Bay. There are also known Neoglacial advances between 4,000 and 3,000 years ago, 2,700 and 2,200 years ago, 1,100 and 900 years ago, and the latest during the Little Ice Age (12th-18th centuries) (Viens 2001). Evidence for one or more of these advances could possibly be found in the upper Takatz Lake inundation area.
Cultural

- Historic

The summary of known cultural resources in the Project vicinity was conducted by Margan Grover, Bold Peak Archaeological Services (Attachment A). The Project area is the traditional territory of the Tlingit, specifically clans of the Angoon People who also have Possessory Rights to Takatz Island (Goldschmidt and Haas 1946). Some resource areas in this territory were shared with the Kake People. Eastern Baranof Island was used for trapping, collection of shellfish, berries and black seaweed. Fish were procured and dried in and along productive anadromous streams and bays. There is no historical reference regarding the traditional use of Takatz Bay, though use of Takatz Island was mentioned in the literature.

- Prehistoric

There are two National Register sites near the project area: 1) humans made one of their first appearances in Southeast at Hidden Falls (SIT-119), a 10,000 year old Paleomarine multi-component site just north of Takatz Bay (Davis 1989), and 2) north of Hidden Falls in Cosmos Cove are +/- 3400 year old fish traps (SIT-086). The close proximity of these sites to the project area and the lack thus far of archaeological remains in Takatz Bay is a question to be addressed during the 2011 survey. Preliminary survey indications suggest Takatz Bay may lack sufficient procurable natural resources or protection in comparison to other areas along the Chatham Strait coastline. A series of barrier falls on Takatz Creek and the muddy flats may be contributing factors regarding the lack of cultural remains thus far recorded in Takatz Bay.

Vegetation

Present vegetation communities probably became established within the last 7000 years (Heusser et al.’s 1985). Some of the larger trees in the survey area are several hundred years old and growing on steep slopes with little to no sediment. There was no evidence of commercial logging, though there were numerous blow-down.

The general vegetation includes western hemlock / Sitka Spruce (*Tsuga heterophylla* / *Picea sitchensis*) to western hemlock / Alaska cedar (*Chamaecyparic nootkatensis*) forests. Western hemlock / Sitka spruce forest is found in both wetland and upland areas, whereas western hemlock / Alaska cedar forest is associated with wetland areas only. Avalanche chutes support thick patches of *Alnus* (alder). Shrubs are thick and difficult to walk through, and are dominated by *Vaccinium ovalifolium* (blueberry), and *Oplapanax horridus* (Devil’s club). Herbs include *Lysichiton americanum* (skunk cabbage), *Rubus pedatus* (5-leaf bramble), *Dryopteris expansa* (shield fern), *Cornus canadensis* (bunchberry), *Streptopsis amplexifolia* (twisted stalk), *Gymnocarpum dryopteris* (oak fern), and *Mianthemum dilatatum* (False Lily of the Valley). Muskegs are dominated by *Sphagnidae* (peat moss).
Fish and Game

Brown bear sign was found throughout the survey area; well entrenched bear trails are the paths through the steep, forested terrain. Along Takatz Creek was sign of beaver and porcupine activity. There were very few deer tracks, and the ones we did see were small. Very few salmon carcasses and little evidence of procurable shellfish were observed on the flats.

Preliminary Survey Results

Proposed Powerhouse Site

The forested, semi-level powerhouse site (16ft asl) is located between the toe of a mountain and the tidal flats (Figure 4), east to west respectively, and bordered on the north by Takatz Bay and an avalanche chute on the south. According to the 1965-66 core data collected by the Bureau of Reclamation, the site area is covered with 3ft of organic soil, underlain by 14ft of unconsolidated talus, over bedrock (Callahan 1970). The numerous shovel tests and soil probes, though negative for cultural indicators, suggest the upper organic horizons are characteristic of forested wetland soil development.

The soils would be classified as Histosols and tend to be thin (average 50cm -1m), fine-grained, with a fining upward sequence. Soils are underlain by a mineral horizon composed of sand, gravel, and fragments of weathered bedrock. According to our shovel tests, the organic wetland soils are hydric; saturated to near the surface, black to very dark brown in color (5YR 2/1 to 10YR 2/2), and characterized by peat (fibric), mucky peat (hemic), and muck (sapric) horizonation, depending on topographic location. Upland soils in the area are similar in composition but tend to be thinner, lighter in color at depth (10YR 3/2 – 10YR 3/4), and lacks hydrology. Upland soils can range from Histosol (forested wetlands) to Spodosol (associated with hemlock forests).

Near the south-end of the powerhouse site are two dilapidated, 12ft x 12ft tent platforms (Figure 5). The platforms are located in a fairly open muskeg area where numerous small trees were cut to support the 2x4 joists and plywood. The age and type of trash observed in the area suggests the platforms may date to 1965-66 when test cores were drilled in the project area by the Bureau of Reclamation. No additional structures were observed. Not considered eligible for listing to the National Register of Historic Places.

Takatz Creek Area Survey

The mouth of Takatz Creek as well as the flats would normally be considered high probability areas, however, other than what is believed to be an abandoned gaging station, no cultural remains were found. High water may have been a contributing factor, though the lack of cultural evidence and the lack of historical reference regarding use of Takatz Bay may be supported by the bays’ poor fish run and shellfish production, muddy flats, and steep terrain. The tidal flats will be reinvestigated in 2011.
A vertical, open-ended, square wood frame crib located in a back-eddy at the base of the lower barrier falls is thought to be remains of the 1951-1960 gaging station. At the time of the survey, the water was too high to get any measurements or detailed photographs. Not considered eligible.

Up-stream of the lower barrier falls along the right side of Takatz Creek in a fairly open muskeg area (Figure 6) we found what appeared to be an old survey control point or survey corner; evidenced by a tree with (2) 16p nails (which may not be associated), another tree near-by with an ax blaze, and between the two, a small log with a sharpened end driven into the muskeg possibly as a survey corner. With the metal detector (3) very rusty wire nails were found near-by buried approximately 10cm into the muskeg. The ax blaze was well healed and may date to circa.1922 when the first dam assessment was conducted (Callahan 1970). This location is outside the immediate project area.

**Conclusion**

No archaeological sites with National Register eligibility were recorded during the 2010 Project survey. The lack of cultural evidence coupled with the lack of historical reference regarding the use of Takatz Bay may be supported by the bays’ poor fish run and shellfish production, muddy flats, and steep, unstable terrain. The tidal flats and specific areas around Takatz Bay will be re-investigated in 2011. The Takatz Lake inundation area will be the primary objective for 2011. We anticipate a potentially difficult survey: remote location, unstable recently deglaciated terrain, weather that can set in for days which negates air support, thaw induced rock slides into Takatz Lake creating a mini-tsunami, brown bear moving around, traveling light and camping, and the bugs.

**2011 Project Expectations**

- Complete the Area 1 Takatz Project survey which includes: re-investigation of specific areas in Takatz Bay, the Takatz Lake inundation area, and the alpine overhead route from Takatz Bay to Baranof Warm Springs assuming the engineering design is completed. Fieldwork will begin as soon as Takatz Lake is ice-free.

- Write and submit for review the Draft/Final Report for the Area 1 archaeological survey 30 days after the fieldwork has been completed.
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Figure 1. Study areas for 2010 and 2011 field seasons. Area 2 will probably not be completed until the 2012 season (From USGS Sitka A-3, 1:63,360).
Figure 2. M/V Lady Ferrell anchored in Takatz Bay, October, 2010.
Figure 3. View NW, of the Takatz Bay flats at mean-high tide; Takatz Creek valley in the background.

Figure 4. View at low tide of the Takatz Bay flats in front of the proposed powerhouse site.
Figure 5. Powerhouse Site. Deteriorated tent platforms.

Figure 6. Area view where the possible survey corner was located.
Figure 7. GPS waypoints for the 2010 Takatz Bay area archaeological survey recorded by one crew member. Each waypoint correlates with photos and location data. The availability of hand-held GPS reception was a constant issue in the steep, forested terrain.

Figure 8. Combined GPS survey coverage of high probability zones in the Takatz Bay area. Survey was conducted on-foot and by skiff, depending on the terrain.
Summary of Known Cultural Resources in the Vicinity of

Takatz Lake Hydroelectric Project

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Executive Summary & Recommendations

Bold Peak Archaeological Services was contracted by Paleo Logics to compile information from the Alaska Heritage Resource Survey database and available literature on known cultural resources in the vicinity of the Takatz Lake Hydroelectric Project. There are a limited number of resources reported in the vicinity of the project. The following report summarizes the available literature and data. It is important to note that the entire project area has not been examined by archaeologists, and the Alaska State Historic Preservation Officer (SHPO), federal agencies, or other stake holders may recommend a survey in the future.

Bold Peak has four recommendations for consideration. First, only two cultural resources have been reported in the immediate vicinity of the proposed project at the outlet of Baranof Lake. SIT-318 has been determined not eligible for the National Register of Historic Places. The community of Baranof (SIT-701) has not been evaluated for the National Register. Bold Peak recommends that SIT-701 be documented, evaluated for the National Register, and potential effects to the site be addressed. Second, several significant cultural resources are outside the project area; three mining period sites (XPA-071, XPA-072 and SIT-733), and two cultural landscapes (SIT-699 and SIT-788). Bold Peak recommends consultation with agencies and stakeholders to address potential impacts to the cultural landscapes in particular. Third, recent archaeological surveys on Baranof Island indicate some potential for rock cairns in higher elevations overlooking bays and passes. Bold Peak recommends at least a cursory survey of the project area for these features. Finally, although few culturally modified trees have been reported in the project area, they are not usually considered eligible for the National Register of Historic Places. Bold Peak recommends that lower elevations be examined for culturally modified trees, as well as undocumented archaeological sites.
**Brief Culture History**

Madonna Moss divided the history of southeast Alaska into the Early, Middle, and Late pre-contact periods, and post-contact period (Moss 1998). The earliest human remains recovered in Alaska to date were encountered on Prince of Wales Island, about 90 kilometers from the project area. The remains have been dated to 9880 BP (years before present; Fifield 1996). This is consistent with evidence from archaeological sites of the early period. The people of the northern Northwest Coast subsisted primarily on marine resources, and lived in moderate-sized semi-sedentary groups (Moss 1994).

The division between the Middle and Late periods was set arbitrarily by Moss around 1,500 years before present because the archaeological record showed material culture change that was consistent and gradual on the northern Northwest Coast. The Late Period ended in AD 1741, when European explorers arrived in Alaska. Little difference in subsistence patterns has been observed in the archaeological record in the Early, Middle, and Late periods. Moss did note that during the Late Period, the artifact assemblage, house structures, mortuary practices, and site locations began to change (Moss 1998:103).

Moss (1998:102) hypothesized that the increase in warfare and raiding that occurred in the Late Period. The evidence for this includes the appearance of the bow and arrow and an increase in the number of defensive sites (Ames and Maschner 1999; Moss 1998). She states this was caused by an increasing population, which reduced the amount of available territory, coupled with environmental changes that affected subsistence (Moss 1998:102). Davis’s (1990) findings supported this theory, stating that in the Late Period there was a transition to larger structures, particularly winter villages and defensive sites. Ames and Maschner (1999) provided further support for this change by concluding that larger multiple family communities were not established until the Late Period.

The artifact assemblages of the Late Period included ground stone and bone technology and some chipped stone. Knives, projectile points, adzes, chisels, and wedges were major parts of the Late Period tool kit. The assemblage also included technology obtained through trade, such as copper tools, stone bowls and lamps, increased use of obsidian, and the introduction of drift iron for tool manufacture (Davis 1990:200).

The region around modern-day Sitka, including Silver Bay and Deep Inlet, is within the traditional territory of the Kiks.ádi people. A seasonal village was reportedly at the mouth of a sockeye stream at the head of Silver Bay, but has not been relocated archaeologically. Hunting and trapping took place around the shores of Silver Bay as well. Petrov reported 39 people living in Silver Bay at the beginning of the 19th century (Goldschmidt and Haas 1998:64; Dangel 2003).

The eastern shores of Baranof Island, including Takatz and Warm Springs bays, are within the traditional territory of the Aanx’aakhitaan Angoon clan. They used the area from Kelp Bay south to Red Bluff Bay for hunting seal, gathering black seaweed, fishing, and trapping. The area was also apparently used by the Deisheetaan people for similar activities (Goldschmidt and Haas 1998:71-7; Dangel 2003).
In 1741, Alexei Chirikov and his crew sailed the Russian exploration vessel the *Sv. Pavel* along the northern end of Chichagof Island, probably somewhere in Lisianski Strait. Europeans probably did not venture into southeast Alaska again until 1775, when the Spanish explorer Bruno de Hezeta explored the areas around modern-day Klawock and Sitka territory. For the next fifteen years, there were several more visitors to the region. Most were Spanish and British, although there were several American boats in the area toward the end of the 18th century (de Laguna 1990:223). Other important visitors to Tlingit territory in the late 18th century included French explorer La Perouse in 1786 at Lituya Bay, and British explorers Cook in 1778 and Vancouver in 1791 (Kan 1999:43-44; Krause 1956:16-17, 24; Oberg 1973:5).

During the 1790s, the Russians explored further into Tlingit territory and in 1799, Aleksandr Baranov established Fort *Sv. Arkistratig Mikhail* six miles north of Sitka. That fort was destroyed and three years later (de Laguna 1990:223; Krause 1956:30). In 1804, the Russians returned to Sitka with a fleet of 300 bidarkas, several hundred Aleuts, and several Russian ships (Bancroft 1960:428; Haycox 2002:97; McMahan 2002:14). They landed at *Noow Tlein* (present-day Castle Hill State Historic Park), which had been a Kiks.ádi settlement of at least four large houses. In anticipation of the Russian arrival, the Kiks.ádi had left their homes on *Noow Tlein*, built a new fort near the mouth of the Indian River one mile to the east (present-day Sitka National Historical Park), and fortified it with several cannons taken from Fort *Sv. Arkistratig Mikhail* (Dauenhauer and Dauenhauer 1990:9; Haycox 2002:98).

Over the course of several days in 1804, the confrontation between the Russians and Kiks.ádi escalated. There were exchanges of fire, and a Kiks.ádi canoe carrying gunpowder was destroyed as it made its way to the Kiks.ádi fort. The final confrontation took place on October 12th, when Russian boats shelled the Kiks.ádi fort while troops and artillery attacked. Between October 13 and 16, there were negotiations between the Kiks.ádi and the Russians, including the exchange of hostages and a Kiks.ádi compromise to abandon the fort. On October 18, Lisianskii sent negotiators back to the fort, but found it had been evacuated. Alex Andrews stated that the Russians had raised a white flag, which the Kiks.ádi misinterpreted so they evacuated. They walked overland for several days on what is known as the “Sitka Kiks.ádi Survival March Trail,” and settled at *Chaaktl’aa Noow* on Chatham Strait (Bancroft 1960:43-432; Dauenhauer and Dauenhauer 1990:19-21; Dean 1994:4; Haycox 2002:98; Jacobs 1990:4; McMahan 2002:14).


Warm Springs Bay and the springs there were likely used before contact, but the Tlingit name has not been recorded. The first cabin was built along the bay by Louis Rulkka in 1902. A post office was established in “Baranoff” in 1907 (XPA-701), closed in 1912, but re-opened in 1917. By 1910, a small resort and sawmill also appeared. The mill was powered by water diverted through a flume and pipe from the river above the outfall. In 1913, the community had about 200
residents. A herring production plant (Warm Springs Bay Packing Company) operated in the community from 1926 to 1930, when the company consolidated with the United States-Alaska Packing Company. By 1941, Baranof had only six year-round residents. Orth (1971:104) reported 15 people living in the community (Betts and Longenbaugh 1997; DeArmond and Roppel 1997:14-18).

There was limited mining in the Silver Bay area at the end of the 19th and beginning of 20th centuries. The Baranof Queen Mine (XPA-071) is about three miles southeast of the head of the bay. A corduroy road reportedly connected the mine to tidewater. The claim included two mines, several cabins, adits, and a trail system. According to the Inventory of Historic Sites and Structures, City and Borough of Sitka, Alaska (Betts and Longenbaugh 1997), there were many mines or claims in the area of the Baranof Queen, including the Bauer (1897), Bullion (1905), Cache (1872), Lucky Chance (1886), Silver Bay (1898 and 1908), and Wicked Falls Prospect (1912). The area has not been surveyed and only one adit adjacent to a recreational trail has been recorded.

The Silver Bay Sheer Zone Mining Zone Mining Site (XPA-072) also encompasses several claims. The 1200-foot-wide and 6-mile-long corridor was patented by the Edgecombe Exploration Company sometime in the 1930s. But it reportedly was the same location, or adjacent to the Hanlon Mines that were patented in 1872. According to the Inventory of Historic Sites and Structures, City and Borough of Sitka, Alaska (Betts and Longenbaugh 1997):

In 1871 Edward Doyle found float gold in the Silver Bay shores, uncovered quartz stringer on Round Mountain, and another on Indian River. The Haley and Rodgers lode, on Salmon Creek, was the first worked by garrison officers. The Steward Mill, on the neighboring claim, was built in 1877, and the Bald Mountain claims were worked for a few years. After 1880 the Juneau discoveries drew miners away, and the district was virtually abandoned…

The location and condition of these claims have not been confirmed by archaeologists.

Archaeological Research in the Project Area

The area researched as part of this study was based on the project drawing (figure 1). This included Silver Bay, Medvejie Lake and Valley, Baranof River and Valley, Baranof Lake, Warm Springs Bay, Takatz Bay, Takatz Lake, and Sadie Lake and the peninsula between Warm Springs and Takatz bays.

There have been dozens of archaeological investigations in the immediate area of Sitka, but a more limited level of research has taken place in undeveloped areas. The US Department of Agriculture, Forest Service (USDA-FS) has conducted a bulk of archaeological investigations on Baranof Island. The first comprehensive archaeological excavation on the island took place at the Hidden Falls Site (SIT-119) at the head of Kasnyku Bay. The site yielded four stratified occupational components – three precontact and one historic. The oldest precontact occupation was in the early Holocene (approximately 10,350 BP), overlain by a glacial deposit, and showed strong affinities with other sites of the period. The other precontact occupations were much more recent – 4600-3200 BP and 3000-1300 BP. Both components were primarily ground stone tool assemblages with strong marine subsistence patterns. The historic component was the remains of
sawmill dating to the 1930s (USDA-FS 1990). The Hidden Falls site is outside the project area, but demonstrates the potential for archaeological sites at lake outlets draining into sheltered bays along the eastern shore of Baranof Island.

Figure 1. Project drawing showing areas researched.

The Inventory of Historic Sites and Structures was completed for the Sitka Historic Preservation Commission and City and Borough of Sitka. The report compiled archival and interview information from a variety of sources to document hundreds of cultural resources within the borough. The inventory did not evaluate these resources for the National Register of Historic Places, however. Inventory forms were included for sites within the project area (SIT-319 Baranof Water Line, SIT-701 Baranof, XPA-071 Baranof Queen Mine, and XPA-072 Silver Bay Sheer Zone Mining site) (Betts and Longenbaugh 1997).

USDA-FS reviewed and sometimes surveyed several areas within the project area. Several studies addressed helicopter landing areas in the higher elevations, including three peaks adjacent to the project area (see figure 3 – USDA-FS 1994a). One landing area was near Lucky Chance Mine (XPA-340) just south of the head of Silver Bay. The survey reported a three-mile long corduroy road, adits, a stamp mill, sawmill, and hydroelectric plant. The mine is part of a larger complex of mining features (USDA-FS 1997). Two additional studies addressed landing areas in the general Sitka/Silver Bay (USDA-FS 1994c, 1995c). These studies were primarily literature reviews, and occasionally included on-the-ground surveys. All concluded the areas had a low potential for cultural resources.
The Bureau of Land Management completed two literature searches for a land conveyance around Baranof Lake. The reports stated there were no significant sites in the conveyance area, but recommended an archaeological survey (BLM 1987, 1993). After searching records available at the Alaska Office of History and Archaeology, it appears that the recommendations were not followed.

Two additional USDA-FS literature searches addressed undertakings on the eastern shores of Baranof Island. A short summary of historic use of Baranof Lake, Warm Springs Bay, and the associated springs was completed prior to construction of a temporary tent platform on the north shore of the lake. The report concluded no survey was necessary (USDA-FS 1999a). The Northern Southeast Aquaculture Association Facilities fisheries enhancement project proposed installing a floating structure in Takatz Bay, which had no potential to effect cultural resources so no archaeological survey was conducted (USDA-FS 1998).

A trail system in the vicinity of Salmon and Redoubt lakes has also been the subject of several cultural resource investigations. An USDA-FS archaeologist investigated the recreation cabin at the outlet of Salmon Lake but found no cultural material (USDA-FS 1991). The cabin was built in 1982 and transferred to the USDA-Forest Service a few years later. The area was surveyed again in 1993, when the USDA-FS proposed to demolish the cabin and build a new one farther from the outlet. No sites were reported (USDA-FS 1993). Investigations for these projects were limited to the shores of Salmon Lake and surrounding trails, so they provide limited information on the proposed project area.

The USDA-FS (1995a, 1996, 2000b, 2004) also conducted cultural resource investigations for several free use permits to harvest lumber along the shores of Silver Bay. The primary concern was ensuring no culturally modified trees were harvested and surveys were limited to the selected trees and immediate vicinity. No sites were reported.

The USDA-FS (2000a, 2002) completed literature reviews prior to issuing permits to the Alaska Army National Guard, 3rd Battalion for “local training areas”. The training areas included lands around Silver Bay. Because the training was limited to higher elevations and was expected to be low impact, the USDA-FS expected no effects to historic properties. The literature reviews did include some discussion of mining sites nearby, however (USDA-FS 2000a, 2002).
Cultural Resources Reported in the Project Area

The following table summarizes reported cultural resources in the vicinity of the Takatz Lake Hydroelectric Project. It also includes sites Bold Peak considered important for the design, permitting, and consultation phase of the proposed project. The data was compiled from the AHRS database and reports from land managing agencies. Refer to figure 2 for an approximate location of these AHRS sites and figure 2 for areas previously examined by archaeologists.

Table 1. AHRS sites reported in or near project area.

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<th>Site name</th>
<th>Description</th>
<th>eligibility</th>
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<tr>
<td>SIT-318</td>
<td>Baranof Water Line</td>
<td>Wood-stave pipe and intake structure in Warm Springs Bay.</td>
<td>No</td>
</tr>
<tr>
<td>SIT-701</td>
<td>Baranof</td>
<td>District. Early 20th century townsite. Some structures collapsed.</td>
<td>n/a</td>
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Important AHRS sites outside APE

| XPA-071| Baranof Queen Mine                 | An early silver property, 1885-1907. Near the head of Silver Bay.          | n/a         |
| XPA-072| Silver Bay Sheer Zone Mining Zone | A 1200’ x 6 mile corridor with several claims dating between 1872 and 1930s. Southeast of Silver Bay, along Silver Bay Trail, towards the base of Lucky Chance Mountain. | n/a         |
| SIT-699| Indian River Park Cultural Landscape Sitka Kiksadi Survival March Trail | Big polygon north and east of Sitka.                                       | Yes/No      |
| SIT-778| Corduroy Road to Pande Base Mining Operation | From inlet to Blue Lake, along Blue Lake Creek for about ½-mile.           | n/a         |

The only known cultural resources in the project area are at the outlet of Baranof Lake into Warm Springs Bay. The Baranof Water Line (SIT-318) has been determined not eligible for the National Register of Historic Places. The community of Baranof (SIT-701) has not been evaluated for the National Register. The community was established by 1907 and transformed to seasonal status by the 1940s. The condition and number of structures older than 50 years is unknown. Bold Peak recommends that SIT-701 be documented, evaluated for the National Register, and potential effects to the site be addressed.

Very few cultural resource investigations have taken place in the proposed project area. One reason is because the USDA-FS considered a majority of the area to have low potential to yield cultural material. A 2007 multi-agency study (National Park Service Midwest Archaeological Center and USDA-FS Tongass National Forest) documented rock cairns on prominent knolls over 600 meters above sea level on the north end of Baranof Island overlooking Peril Strait. Based on lichen growth, the cairns are believed to have been built before contact for either subsistence or defensive purposes. They have been determined eligible for the National Register (draft AHRS cards on file at Office of History and Archaeology). These recent discoveries challenge the previous notion that there is no potential for precontact cultural resources above 100 meters in southeast Alaska. Bold Peak recommends at least a cursory aerial survey of the higher elevations within the project area.
There are several significant cultural resources outside the project area: three mining period sites (XPA-071, XPA-072 and SIT-733), and two cultural landscapes (SIT-699 and SIT-788). Two mining sites (XPA-071 and XPA-072) are at the head of Silver Bay, but are part of larger mining complexes. These sites only have the potential to be effected by the project if the area of effect shifts. The two large cultural landscapes share boundaries, but only SIT-699 has been determined eligible for the National Register. Although the landscapes are outside the project area, they represent places where important historical events, as well as traditional land use took place. Bold Peak recommends consultation with agencies and stakeholders to address potential indirect impacts to the cultural landscapes.

Figure 3 illustrates areas examined by archaeologists where no cultural resources have been recorded. Although few culturally modified trees have been reported in the project area, they are not usually considered eligible for the National Register of Historic Places. Bold Peak recommends that lower elevations be examined for culturally modified trees, as well as undocumented archaeological sites. Of particular interest would be Warm Springs Bay and Baranof Lake, Medvejie Lake, Takatz Bay, Sadie Lake, and Bear Cove in Silver Bay.
Figure 3. Project areas previously investigated by archaeologists (hatched areas).
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Ames, Kenneth M. and Herbert D.G. Maschner  
1999  *Peoples of the Northwest Coast: Their Archaeology and Prehistory.* Thames and Hudson, Ltd., London.

Bancroft, Hubert Howe  

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1997  *Inventory of Historic Sites and Structures, City and Borough of Sitka, Alaska: Part II Site Index Inventory Forms.* Prepared for the Sitka Historic Preservation Commission and City and Borough of Sitka.

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Kan, Sergei

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McMahan, J. David

Moss, Madonna


Moss, Madonna and Jon M. Erlandson

Oberg, Kalervo

Orth, D.J.

US Department of Interior – Forest Service (USDA-FS)


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<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Author/Agents</th>
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<td>2000a</td>
<td><em>Archaeological Clearance for Alaska Army National Guard, 3rd Battalion, Sitka and Juneau Local Training Areas, Special Use Permit.</em></td>
<td>Rachel Myron, USDA Forest Service, Chatham Area, Tongass National Forest, Sitka.</td>
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## Appendix A: Reports and Manuscripts Consulted

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<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Results and notes</th>
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<tbody>
<tr>
<td>Mobley, Charles M. and Associates.</td>
<td>Sawmill Creek Road Creek Upgrade, Sitka, Baranof Island, Alaska: Cultural Resource Investigations.</td>
<td>Outside project area, but provides good background information on Sawmill Creek.</td>
</tr>
<tr>
<td>Department of the Interior, Bureau of Land Management, 1993.</td>
<td>Report of Examination for Cultural Resources.</td>
<td>No information on sites or recommendations, but is for same area (“Power Site Classification 221”) around Baranof Lake.</td>
</tr>
<tr>
<td>USDA-FS. Chatham Area, Tongass National Forest, Sitka. Rachel Myron. 1998.</td>
<td>Heritage Resource Review for Northern Southeast Aquaculture Association Facilities</td>
<td>For fisheries enhancement projects, including Takatz Bay. The floating structure there had no potential to effect cultural resources.</td>
</tr>
<tr>
<td>USDA-FS. Chatham Area, Tongass National Forest, Sitka. Rachel Myron. 2000a.</td>
<td>Archaeological Clearance for Alaska Army National Guard, 3rd Battalion, Sitka and Juneau Local Training Areas, Special Use Permit</td>
<td>Training areas, some near project area around Silver Bay. Some discussion of mining sites nearby. But no effects expected.</td>
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