

PRELIMINARY DRAFT BEAR SAFETY PLAN

BLUE LAKE HYDROELECTRIC PROJECT EXPANSION

FERC No. P-2230

Prepared By:

City and Borough of Sitka Electric Department

Sitka, Alaska

May, 2011

INTRODUCTION

The City and Borough of Sitka, Alaska ("City"), owns and operates the Blue Lake Hydroelectric Project ("Project, FERC No. 2230) located near Sitka, Alaska. The 6.5 megawatt project is located approximately 7 miles southeast of Sitka.

For the past 3 years, the City has conducted engineering and environmental studies to support issuance of a capacity related amendment to the Project's FERC license to modify the Project including but not limited to the following:

- Raise the Project dam by as much as 83 feet to increase reservoir capacity and generating head;
- Construct a new and larger powerhouse and install new turbine generators;
- Construct a New surge chamber near the powerhouse; and
- Construct a new water intake in Blue Lake at a different location from the existing intake.

NEED for THIS DRAFT PLAN

The City submitted Draft and Final Amendment Applications (the DAA and FAA, respectively) to the Federal Energy Regulatory Commission (FERC) in Washington D.C. In response to the FAA, the FERC sent the following request for additional information, necessary before the Commission could continue with its acceptance of the FAA and issuance of the requested amendment:

"Your application does not describe any proposed protection, mitigation and enhancement (PM&E) measures that may be needed to mitigate the project effects. Please provide the details of any PM&E measure that may be needed for (1) wetland affected by the proposed project; (2) salmonid species (pink, chum, and coho salmon) and their essential fish habitat identified in Sawmill Creek that may be affected by the proposed project; and (3) any other environmental resources including fish, wildlife, water quality, and vegetation affected by the proposed project. All PM&E measures should be developed in consultation with federal and state resource agencies. Your filing should include documentation consultation including agency comments and recommendations and your response to any recommendations."

To respond to this item, the City has prepared draft plans related to certain PM&E measures, according to those normally required by consulting state and federal resource agencies during construction of recent hydro projects in southeast Alaska. In all cases involving significant construction, Stakeholders required an Environmental Compliance Monitor (ECM) to oversee compliance with other plans and procedures. This plan uses language from recent, accepted plans as the basis for early review.

BEAR SAFETY PLAN

The following Bear Safety Plan is in the form of a Bear Safety Instruction Manual, below, which would be required reading by all personnel hired to work, either during construction or long-term operation, in the Blue Lake area as part of their Blue Lake Hydro Project responsibilities.

During construction, the measures in the Manual will be monitored by the Environmental Compliance Monitor. During the remainder of the project's operation period, compliance with measures in the Manual will be the responsibility of the Licensee.

Agreement with the conditions of the Manual will be a provision of employment for all workers on the project. The Manual has signature spaces, documenting that the worker has read the plan, and will abide by its directives and restrictions.

Bear Safety Instruction Manual
Blue Lake Hydroelectric Project Expansion

FERC No. 2230

Prepared by:

City and Borough of Sitka Electric Department

May, 2011

This manual is intended to provide information on bear safety to workers who will be in the Blue Lake project area as part of the construction or operation of the Blue Lake Hydroelectric Project Project Expansion. The manual was prepared in anticipation this will be a license article as well as a Forest Service 4(e) condition.

The Blue Lake watershed has a relatively small number of bears, but salmon runs in Sawmill Creek and remote conditions around Blue Lake favor bear use in the Project Boundary near proposed construction and monitoring areas. While deaths and injuries due to bears are not common in the area, bear-human encounters are common. With the increased construction-related human activity expected in the Project area, bear-human encounters are likely to increase. It is the purpose of this manual to provide information which will help minimize bear-human conflicts, and to help reduce the risk of injury, death, or property damage from unavoidable encounters.

1. Instructions for operating practices when in bear country that minimize possible conflict.

1.1 Bear Conflicts. The primary purpose of this manual is to prevent bear conflicts. Bear conflicts are defined as direct or indirect negative contact with bears caused by the presence of project workers in the bears' places of usual habitation and use.

In most serious cases of bear conflict, it is the bear, which eventually suffers. The policy of the Alaska Department of Fish and Game is to kill problem bears, not to relocate them. If a bear conflict results in the bear having to be killed, however, ADF&G will investigate the incident. In the majority of investigations, it has been found that the incident was caused by human factors. In such cases, relative to a Blue Lake Expansion Project worker, ADF&G would hold the worker responsible for the incident, potentially resulting in fines and charges.

THEREFORE, THE CENTRAL THEME OF THIS MANUAL IS AVOIDANCE OF BEAR CONFLICT.

Conflicts may include:

Property Damage. Bears can be very destructive of property. They are capable of damaging metal and wood structures, frequently chew on plastic and rubber items, and have been known to bite through electrical cable sheathing, tear off substantial wood or metal doors, and destroy large food caches. Measures to prevent property damage are presented in this manual.

Interference with Project-Related Work. Presence of bears near the project construction area may disrupt work progress by requiring that work be temporarily suspended, or simply through worker curiosity and attention to the bear instead of the business at hand. It is extremely important to follow habits which do not needlessly attract bears to the work-site.

Attacks. Bears will and do attack humans; encounters sometimes result in serious injury and occasionally death. Bear attacks are generally avoidable, and measures to avoid them are discussed in this manual.

1.2 “Bear Country”. Based on casual observations during field surveys, one may reasonably expect to encounter bears virtually anywhere in the Blue Lake Project area.

Therefore, provisions of this bear safety plan apply to all workers in all areas at all times after arrival in the Blue Lake watershed. There are, however, certain locations within the Blue Lake/Sawmill Creek drainage where one might be more likely to encounter bears or be at greater risk because of topography and/or vegetative cover characteristics. These areas are described in Section 3 of this manual.

2. Bear Conflict Minimization. Project workers will abide by the following guidelines at all times in the Blue Lake/Sawmill Creek area:

2.1. Keep A Clean Work Area, Particularly Regarding Food and/or Garbage. Elements of this plan describe Food Disposal recommendations in detail (item 2, below), and workers will be required to adhere to Food Disposal protocols on a daily basis.

2.2 DO NOT FEED THE BEARS. This should be self-evident and explanatory, but it is amazing how many visitors to bear country create serious problems by intentionally baiting or feeding bears.

2.3 When Traveling On Foot In Bear Country, Make As Much Noise As Possible. Try to avoid surprising bears, particularly in areas where it is very quiet, or when steady background noise, from nearby construction or the sound of a stream, makes it hard for a bear to hear your approach. Generally, near construction sites, disturbance from human activity, machinery and vehicles should keep bears away, but bears often tolerate considerable human disturbance, and it should not be assumed that, just because there is a lot of human activity in an area, there will be no bears.

2.4 Be Alert And On The Lookout For Bears. Early detection of a bear offers the best avoidance. Surprising a bear is dangerous and can often be avoided by keen observation of the countryside into which you are moving. Look for movement, the horizontal line of a bear’s back and belly, and different colors. Other signs of bear use include tracks, fresh scat, beaten down or broken berry bushes, grazed sedges, foul odors or

a gathering of scavenging birds such as ravens, jays, or magpies. Bears may in the Project area range from pure black to light blond, but are generally different than the colors of the surrounding vegetation.

If you are walking along the access road or any trail, watch ahead and approach blind spots slowly and carefully. As you approach a blind corner in an area of limited visibility, make a lot of noise, by yelling or yipping, or clanging metal objects together. Observe the brush near the trail closely; bears often move and feed on berries in brush just off the trail, and are easily surprised.

2.5 If You Encounter A Bear, Follow These Suggestions: If the bear is more than about 50 yards away, or if it is close but does not appear to have seen you, back slowly away from it, increasing the distance between you and the bear. Do not run, even if the bear is some distance away.

If a bear is at some distance (over 50 yards) and sees you, wave your arms, stand as tall as possible, and yell at the bear. Try to help the bear identify you as a human. If you are with others, stay together as group. A bear is less likely to attack a group of people.

If the bear is quite close (less than 20 or 30 yards), and is coming at you rapidly, do not run. Speak in low soothing tones as you back slowly away. The bear may bluff charge, stopping within 10 yards of you. If you have a firearm, prepare to shoot the bear if it does not stop its charge. If you must shoot the bear, aim for the center of mass, just below the head. If you shoot the bear, continue firing until the bear is dead; a wounded bear is extremely dangerous to all personnel.

If a bear attacks, fall into the fetal position with your knees pulled over your stomach area and hands clasped behind your neck. Pull your head to your chest, and keep your elbows over your eyes. Try to remain silent and motionless in this position until the attack has stopped and the bear has left the area.

4. Instructions For Keeping Construction Sites And Refuse Areas Clean.

4.1 Food Disposal. It is expected that construction workers will have one or more meals in the construction area each day. If the construction camp is used near the Saddle Dam, meals will take place 2-3 times per day. Garbage, food-contaminated utensils, paper, etc.

will be collected on a daily basis, placed in bear-proof containers, and removed from the project site for proper disposal several times a week for a construction camp and daily if there is no construction camp. Food-related items left at the worksite even for short periods may draw bears from great distances. Food items left overnight during high bear population periods will almost ensure a bear encounter the following morning. Bears that are able to get even a small amount of food will return to the area repeatedly to search for food, may show little or no fear of humans, may become aggressive, and will likely have to be destroyed.

The Construction Forman at each project construction location will be responsible on a daily basis for policing his/her construction site for food after each meal, and at the end of each construction day. The objective will be to leave no food-related or contaminated items whatever around the project site. If construction crews leave daily, they will take their food scraps with them daily.

Performance of each Construction Forman relative to daily food cleanup will be monitored by the Environmental Construction Monitor.

4.2 Feeding Bears. Simply and emphatically, **DO NOT FEED THE BEARS.** Bears fed by humans generally have to be destroyed. If a bear incident resulting in human or bear injury or death shows evidence of bear feeding, ADF&G will likely consider the incident human caused.

5. Recreational Activities of Project Workers. The Blue Lake and Sawmill Creek areas have many recreational opportunities, which might create potential for bear encounters. These include

5.1 Fishing/Hiking/Hunting. Fishing and hiking in the construction and nearby areas are available recreation activities for project workers. Food disposal and bear avoidance measures listed above apply to workers during recreational pursuits, including cleaning of fish (never discard fish viscera in the construction area) and hiking (pack out all leftover food, containers and utensils).

(Note: Anyone intending to fish in the project area or elsewhere in the state must obtain a valid Alaska State fishing license and permission from the licensee).

5.1 Firearms. No firearms will be routinely allowed in the construction area, unless permitted in writing by the Construction Superintendent. It will be the responsibility of the Construction Superintendent to arrange for, securely store and distribute firearms in the construction area. Such firearms will be permitted only for the purpose of bear protection, and not for control of problem bears or hunting. The Construction Superintendent will have access to non-lethal means of bear protection, such as cracker shells, flares, rubber or plastic bullets or baton loads, which will generally be encouraged as the primary means of bear defense. Firearms will be used as a lethal deterrent to stop bear attack when non-lethal techniques are unsuccessful or impractical.

5.2 Hunting/Trapping. **Project workers will be prohibited from hunting and trapping within Project lands at any time during project construction, unless permission by licensee and a permit from ADF&G is granted. Hunting or**

trapping on Forest Service lands must be done no closer than a mile to the construction site.

6. Procedures To Deal With Problem Bears.

If a bear is, or it seems likely to become a problem, the following procedures should be followed:

6.1 Report Potentially Problematic Incidents Promptly. If a bear is seen consistently in a work area and shows threatening behavior (false charges, failure to flee) the appropriate Construction Foreman or Superintendent will report the incident immediately to:

Alaska Department of Fish and Game, Division of Wildlife Conservation at 907-747-5449 (Sitka) Sitka Police Dept 907-747-3245 and the Alaska State Troopers, Fish and Wildlife Protection Division at 907-747-3254 (Sitka). Before calling, try to establish any identifying features of the bear(s), the location of the incident, and time of day. Deciding whether an incident is “potentially problematic” or not is up to the discretion of the workers and Foreman, but it is better to report an incident than not.

6.2 Report Bear Attacks. If there is a bear attack, the nearest person to the victim should contact:

Sitka Police Department at 907-747-3245 and the Alaska State Troopers, Fish and Wildlife Protection Division at 907-747-3254.

Decisions on what to do with problem bears will be made by Alaska Department of Fish and Game, Division of Wildlife Conservation and the Alaska State Troopers, Fish and Wildlife Protection Division. No independent actions should be taken by project workers to kill a problem bear, unless there is a clear and immediate threat and the action is justifiable under State of Alaska legal provisions for defense of life and property (5AAC 92.410.).

6.3 State Law Regarding Attractants. Alaska State law (5 AAC 92.230) makes it illegal for any person to feed or intentionally leave food or garbage in a manner that attracts a bear, wolf, fox, or wolverine. Under the state’s policy for managing bear/human conflicts, individuals who take a bear under “defense of life or property” provisions **will be warned or cited** if the take is brought about by the improper disposal of garbage or a similar attractive nuisance.

6.4 What to do if a Bear is Shot in “Defense of Life or Property”. Any person who takes a bear in “defense of life or property” shall notify his supervisor and the Alaska Department of Fish and Game immediately, and shall submit a written report of the circumstances of the take to his supervisor and the Alaska Department of Fish and Game with 15 days of the take. The bear hide/skull must be “sealed” and an affidavit completed.

Brown Bear-- The hide (including the claws) and the skull must be salvaged and surrendered to the Alaska Department of Fish and Game.

I have read, understood, and hereby agree with and will follow the conditions and restrictions of this Bear Safety Plan.

Signature

Date