1.1.14 Summer Operations

During the summer, the AAs draft Libby Dam within the NMFS 2010 Supplemental BiOp and USFWS BiOp's specified draft limits based on flow recommendations coordinated at TMT. TMT considers a number of factors when developing its flow recommendations, such as: the impact of flow fluctuations on bull trout and other resident fish below the project, the status of juvenile salmon outmigration in the lower Columbia, attainment of flow objectives, water quality, and the effects that reservoir operations will have on other listed and resident fish populations.

During the summer (July and August), the AAs will operate Libby Dam to help meet local resident fish needs and to help meet flow objectives for juvenile salmon out-migration in the Columbia River. In the summer the AAs will draft to 10 ft from full by the end of September (except in lowest 20th percentile[1] water years (The Dalles April-August <72.2 maf), as measured at The Dalles, when draft will increase to 20 ft from full by end of September). If the project fails to refill, then release inflows or operate to meet minimum bull trout flows through the summer months. Rationale for the experimental draft was adopted by the Northwest Power and Conservation Council (Council) and further details of the evaluation can be found in the FCRPS 2008 Biological Opinion from NMFS (Appendix B.2.1).

Arrangements for retention of July-September water in Lake Koocanusa are possible through a Libby-Canadian storage water exchange under the current Libby Coordination Agreement, which was signed February 16, 2000. However, this operation cannot be guaranteed in any given year because it must be mutually beneficial to the Canadian Entity and the U.S. Entity. Information needed for such a determination such as the volume of the water year, is not available until well into the migration season. This operation, if any, for a given water year is generally not finalized until June or July of that year. The exchange agreement reduces the draft of Lake Koocanusa and provides an equivalent amount of water from Canada.

~~For~~During September, the Corps will use the best available forecast at the end of August to set a flow that will gradually draft Libby to the target elevation by the end of September as defined in the FCRPS BiOp RPA (Appendix 7). If this calculated flow is greater than the bull trout minimum of 6 kcfs, then the discharge will be maintained until the draft target is met or the month ends, whichever comes first.

1.1.15 Kootenai River Habitat Restoration Project

From August through October in 2013-2015, the AAs will be operating Libby Dam in coordination with the Kootenai Tribe of Idaho in order to complete the Kootenai River Habitat Restoration Project. The restoration strategy for this portion of the project is to: stabilize eroding banks, trap sediment, and promote floodplain development, increase riparian vegetation, and increase channel margin and side channel complexity. Releasing ~~minimum~~ a maximum ~~flows~~ flow of 8 kcfs during ~~through~~ September and October~~,~~ (minimum flows are 6 kcfs and 4 kcfs respectively) will~~,~~ facilitate the construction work. In order to accommodate this operation, the

[1] The lowest 20th percentile as measured at The Dalles (RPA 4 in RPA Table, pg 6 of 98) based on RFC's 30-year statistical period (1981-2010) using May final for The Dalles Apr-Aug (RPA 14 in RPA table, pg 15 of 98)

AAs will coordinate with TMT on the actual operation to reach the BiOp 30 September elevation target of either 2439 or 2449 ft. In the event of high rainfall events in the summer, the TMT will discuss ~~shifting the target from 30 September to 31 August to~~ maintaining the highest river stage possible (up to a maximum of 8 kcfs to support the Habitat Restoration Project) during September and October while ~~increase~~ maintaining the probability of reaching the reservoir elevation target. ~~and support the Habitat Restoration Project.~~