Fish Passage Planning And Development For Bull Trout At Thompson Falls Dam, Montana

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PPL Montana is the owner of the Thompson Falls Dam (Project), built in 1917 on the Clark Fork River near Thompson Falls, Montana. The listing of the bull trout as a threatened species under the Endangered Species Act prompted the preparation of a biological assessment (BA) to assess the impacts that the Project may be having on bull trout (*Salvelinus confluentus*), and to make recommendations about possible conservation measures to reduce those impacts. That BA concluded that the Project might adversely affect bull trout, in large measure due to a lack of upstream fish passage. An Interagency Technical Advisory Committee was established to help guide PPL Montana in their efforts to conserve bull trout by providing upstream passage. Proper location of a fish collection facility is critical to the success of an effective fish passage solution. In order to find the most effective location for the fishway, trout were radio tagged, and stationary receivers were positioned at key locations to continuously monitor fish movements. Results indicated that trout migrate upstream to the main dam, the upstream most location in the tailrace, during the early spring. Therefore, the main dam was selected as the fishway site. An alternatives analysis assessed three potential fishway configurations at that site. The Interagency Technical Advisory Committee recommended the right bank full height ladder alternative, and PPL Montana concurred. This fishway is currently being designed, and will include fish sampling facilities that will allow maximum operational flexibility for fisheries managers.