

Change Request Number: 11AppB001

Date: December 20, 2010

Proposed by: CRITFC

Location of Change Appendix B Transportation section f (4)

Current Language: (4) Holding Time: Maximum holding time in raceways will be 2 days. An exception to this criterion is instances when additional holding time is needed to collect sufficient fish for tagging to conduct research studies.

Proposed Change: (4) Holding Time: Maximum holding time in raceways will be 2 days. An exception to this criterion is instances when additional holding time is needed to collect sufficient fish for tagging to conduct research studies. An additional exception is if the raceway temperatures at McNary dam exceed 68 degrees F then fish will be truck transported on the days when barging is not available.

Reason for Change: This has been a long standing issue with holding smolts in high temperatures in raceways. The potential for disease transmission and increased stress leading to increased mortality is heighten at higher temperatures and it would be risk averse to not hold actively migrating smolts in these conditions longer than necessary. This operation was successfully implemented in 2010 and we are now suggesting that this becomes a standard operation. As data becomes available this operation can be reevaluated.

Comments from others:

USFWS- support

NWW Fisheries- 2010 was implemented due to some miscommunication. Dykstra does not recommend using last year as the standard. He also doesn't see how this change form solves a problem. He said the mortality isn't occurring in the raceways, so reducing raceway holding time isn't going to solve the mortality problem. There have been two instances, one in 1994 and one in 2009. In both cases, mortality in the raceways was not the issue. The mortality was occurring in the collection channel. The collection channel has areas of warm water and cold water. The mortality occurred with then was a stratification in the channel. Dykstra provided some numbers of mortality below 68F (2.3% mortality in 2009), above 68F (first 28 days 6.3% most in first three days. Second 28 days 1.1% in 2009).

NOAA- this is more about being protective of fish in the raceways. There hasn't been a problem and we don't want to see a problem. Fredricks said this will need to go to the Region and NWW will have to provide costs. In addition, this issue goes away once the new outfall is installed.

CRITFC- study permits have a cutoff of 68F for tagging, so if 68F is a stressful temperature, then we should reduce holding and handling at temperatures at or above 68F. Fredricks commented on Dykstra's numbers, saying densities need to be considered as well.

Record of Final Action: this will be an executive decision. Not approved at 21 January 2011.