The use of PIT tag imprinted video images in CRITFC adult and juvenile salmon research at Bonneville Dam

CRTIFC has worked on implementing technology developed by Salmonsoft (FishTick) which imprints PIT tag codes on video to enhance two projects at Bonneville Dam. The first, is as part of our adult Chinook, sockeye, and steelhead sampling and PIT tagging project. The sampling is recorded onto a computer, with a PIT tag signal imprinted when the fish is scanned. This provides us a backup of PIT tag codes in case of reader malfunction as well as a means of checking data and sampling errors such as incorrect recording of lengths and double tagging.

A second project seeks to use video to identify, enumerate, and determine the condition of passing smolt in the bypass approaching the Bonneville Dam smolt monitoring facility. We had hoped that we could also imprint PIT tag codes on this video, allowing us to make available video to researchers who might be interested in the size and condition of tagged fish as they pass Bonneville Dam. However, we have found that it is impossible to get sufficient PIT tag detection read range to obtain video without more major modifications to the bypass. An alternative we are pursuing is to find an alternate site that we can optimize for imprinting PIT tag codes on video.