# Fish Passage Plan (FPP) Change Request Form

**Change Form # & Title**: 19TDA003 – AWS Backup Operation

**Date Submitted**: 12/31/2018

**Project**: TDA

**Requester Name, Agency**: Bob Cordie, USACE

**Final Action: Approved – 2/7/2019**

**FPP Section**: TDA sections 4.3.2.1.a and b.

**Justification for Change**: New East fishway AWS backup system available.

**Proposed Change**: *[see below with edits to existing FPP in track changes]*

**4.3. Maintenance – Adult Fish Facilities**

**4.3.2. Non-Routine Maintenance.**

**4.3.2.1. Fishway Auxiliary Water Systems.** Most fishway auxiliary water systems operate automatically. If the automatic system fails, the system will be manually operated by the project personnel until the system is repaired. When this operation becomes necessary, project personnel will increase surveillance on the adult system to ensure that criteria are being met. In the event of AWS failure, FPOM will work with the project to determine the best operating procedure.

**4.3.2.1.a. Powerhouse.** If one of the two fishway auxiliary water turbines fails or malfunctions for any duration, use the following sequential procedure until a fishway entrance head of 1' is achieved:

Increase discharge of remaining operating fish unit to maximum capacity.

Open AWS backup water supply.

Close entrance weir S1.

Set junction pool weirs 4 and 6 to no less than 4’ below junction pool elevation.

Raise entrance weir E2 and E3 to 8’ depth below tailwater.

Close 2 to 3 south entrance diffuser valves.

Close entrance weir S2 in 1’ increments.

Close entrance weir W2 in 1’ increments.

Close entrance weir W1 in 1’ increments.

Differentials for open entrances should be checked between each of the steps above.

**4.3.2.1.b.** If both of the fishway auxiliary water turbines fail or malfunction, regardless of fish passage season, the adult fish passage facility will be operated as follows:

Open AWS backup water supply.

Raise the south entrance weirs to elevation 81’msl (closed position).

Close west entrance.

Close entrance weir E1, and keep E2 and E3 at 8’ depth.

**4.3.2.1.c.** If both of the fishway auxiliary water turbines and AWS fail or malfunction, regardless of fish passage season, the adult fish passage facility will be operated as follows:

Raise the south entrance weirs to elevation 81’msl (closed position).

Close west entrance.

Close entrance weir E1 and E2 and keep E3 at 6’ depth.

Evaluate modifying spill operations at the north shore ladder to enhance adult passage.

**Comments**:

 2/7/19 FPP Meeting: revised 4.3.2.1.b. iv to correct weir configuration and depth, and added 4.3.2.1.c.

**Record of Final Action**: Approved as revised at the FPOM FPP meeting on 2/7/2019.