

From: Lindsey_Lewis@fws.gov
Sent: Monday, January 09, 2012 11:36 AM
To: Curtis Warner
Cc: rlholt@agfc.state.ar.us
Subject: Eel Ladders and Fish Tag Sensors
Attachments: Receiver_Drawing.jpg; vr2w.jpg; Dam2_a.jpg; Dam2_b.jpg; YancopinBridge_b.jpg; BenzalBridge_b.jpg

Curtis,

Thanks for your interest and thoughts during our conversation. I had not considered the need to place a sensor on the hydropower side as necessary, but after our conversation I now believe it is critical to our study. Therefore, we would like to request permission from Arkansas Electric Cooperative Corporation to place a sensor station on the powerhouse to detect tagged fish approaching the downstream side.

The Service in cooperation with Mississippi State University, the Arkansas Game and Fish Commission, and the U.S. Army Corps of Engineers has tagged over 100 pallid sturgeon, a federally listed endangered species, in the Mississippi River with acoustic transmitters and placed a large array of sensors along the Mississippi, White, and Arkansas Rivers. Sensors placed on the Yancopin bridge detected two of these fish this past spring leading us to expand our survey area by placing additional sensors upstream of the dam near Pendleton and immediately downstream of the dam on the spillway side. We would like to place an additional sensor on the powerhouse side to insure detection of any fish entering the channel approaching the powerhouse.

I have added pictures below as example of the VR2 sensor and the sensor stations along with a diagram of how one is placed on a bridge. The pipe just has to be long enough for protection and attachment. As long as we can get it in the water during flow events and can then retrieve it at low water it should work fine. Also, it obviously will need to be attached to something that isn't going anywhere.

Link to an eel ladder video:

<http://www.youtube.com/watch?v=BiWBtiBXTpk>

Thanks,

Lindsey Lewis
Biologist

US Fish & Wildlife Service
Arkansas Field Office
110 South Amity Rd., Suite 300
Conway, Arkansas 72032

(501) 513-4489 - voice

(501) 513-4480 - fax

Lindsey_Lewis@fws.gov

<http://www.fws.gov/arkansas-es/>