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DEPARTMENT OF
WATER RESOURCES

July 20, 2011

Idaho Department of Water Resources
322 East Front St
PO Box 83720
Boise, ID 83720-0098

*Subject: Measuring Device Recommendations for Jusilla Bow Reservoir Permit No.
65-22912*

Dear Sandy Hemenway:

On behalf of our client, Jug Mountain Ranch LLC, this letter provides recommendations and request for approval for measuring devices that are acceptable by IDWR for measuring Jusilla Bow Reservoir inflows and outflows.

I recently met on site with Craig Collins, who manages reservoir operations for Jug Mountain Ranch, and Jerry Greenland, Watermaster. We identified preferred locations for installing measuring devices. Jerry stated that the typical flows he would be measuring at this facility are up to 50 inches (1 cubic foot per second). Both locations identified provide reasonable access for watermaster use.

The proposed inflow measuring device will be located on the upstream end of the culvert pipe under Farm to Market Rd, installed on the west side of Farm to Market Rd, about 360 feet south of Ashton Ln. The legal location is T17N R03E Section 12 SWNW. We recommend mounting a 24-inch Cipoletti weir blade to a plywood bulkhead that can be inserted into the inner bell of the culvert pipe entrance. A staff gage can be mounted to the bulkhead. Calking or other appropriate material will be used to seal around the device.

The outflow measuring device will consist of a 24-inch Cipoletti weir located about 1,200 feet below the outlet of Jusilla Bow Reservoir in the stream channel. The weir blade will be installed in a concrete or steel structure. At this location, the channel conveys flows released from the dam outlet gate and spilled through the spillway.

Included with this letter, please find:

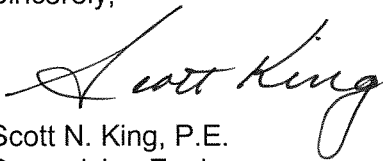
1. A map showing locations of the proposed devices is attached.

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2. A sketch of the proposed inflow weir and bulkhead.
3. Photograph of the upstream end of the culvert pipe on Farm to Market Rd.

Please contact me directly if you have any questions regarding these recommendations. Jug Mountain Ranch plans to have these devices installed by August 9, 2011

Sincerely,



Scott N. King, P.E.
Supervising Engineer

cc: John Westra, P.E. / IDWR Western Region Manager
Craig Collins / Jug Mountain Ranch
Jerry Greenland / Watermaster

File: 159.0070

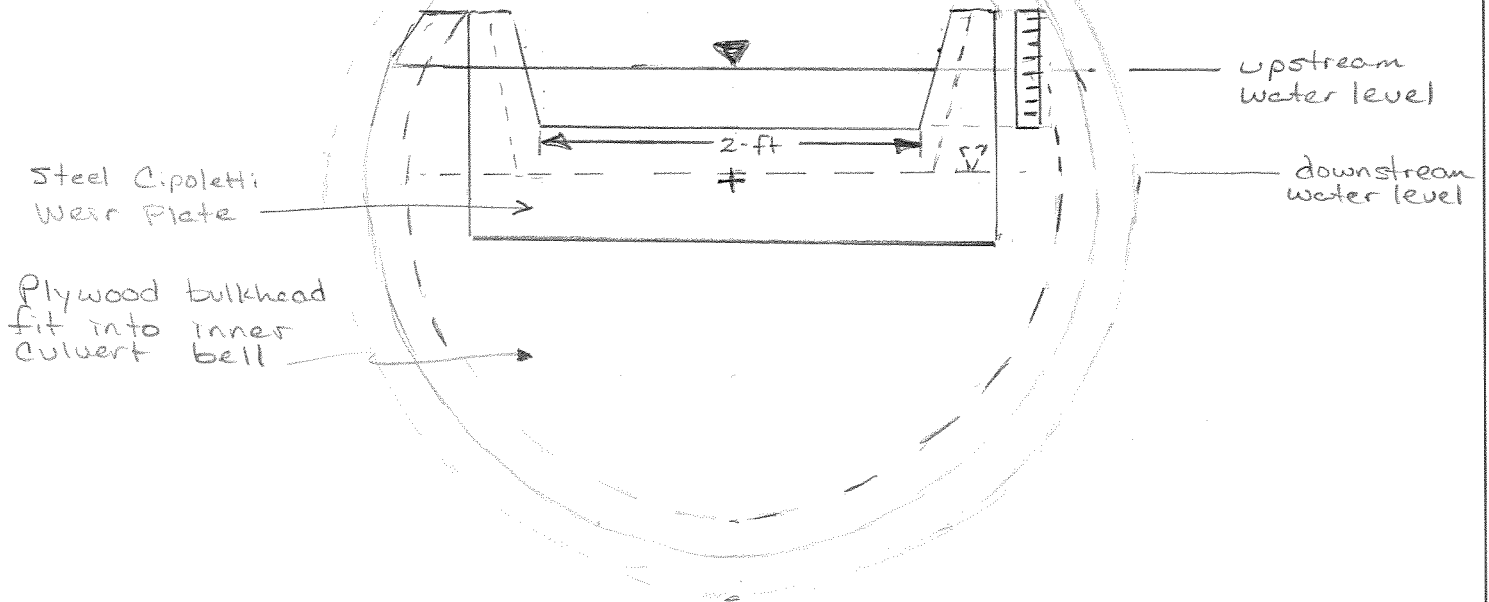




By S. King Date 7-18-2011 Client Jug Mountain Sheet of
Chkd By Description Jusilla Bow Inflow Measurement Job No

PRELIMINARY
DESIGN

NTS



Attach weir blade
to plywood bulkhead

Insert plywood
bulkhead into culvert
pipe bell. Seal around
edges.

