



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER
Governor
GARY SPACKMAN
Interim Director

November 11, 2009

DuWayne Kimball
USDA Forest Service
2647 East Kimberly Road
Twin Falls, ID 83301

Dear Mr. Kimball:

You recently contacted me regarding potential Idaho Department of Water Resources (IDWR) dam safety jurisdiction relating to a recently constructed water storage facility located within the Southeast ¼ of the Southeast ¼ of Section 02, Township 13 South, Range 24 East, B.M. This particular water storage facility is part of a snow making operation associated with the Pomerelle Ski Resort and associated with water right permit 45-7745 in the name of the USDA Forest Service.

On November 5th, I had the opportunity to visit the site and view the water storage facility and surrounding area along with Jeff Cooper of this office and Jeff Burrows, a representative of the Pomerelle Ski Resort and the individual who supervised the construction of the facility. The site visit revealed a recently constructed earthen embankment located approximately 750 feet southwest of the lodge at the Pomerelle Ski Resort. A level survey was conducted and revealed that the embankment has an approximate hydraulic height (vertical distance from downstream toe to the maximum water storage elevation, or spillway crest) of 20.3 feet. The reservoir behind the embankment was measured via GPS and a tape measure and has a surface area of approximately 0.13 acres ($\approx 5,600$ ft²). Mr. Burrows indicated that the reservoir has an average depth of about 6.5 feet and was designed to impound 300,000 gallons of water. Using an average depth of 6.5 feet the reservoir would store approximately 0.85 acre-feet ($\approx 277,000$ gallons) of water.

IDWR regulates dams (construction, operation, and maintenance) above a certain size in Idaho pursuant to the dam safety statutes outlined in Sections 42-1709 - 42-1721, Idaho Code. These statutes are available via the Internet at the following address...

<http://legislature.idaho.gov/idstat/Title42/T42CH17.htm>

Section 42-1711, subsection (b), Idaho Code, indicates that in order for IDWR to regulate a dam under the safety of dam statutes, rules, and regulations, the dam must be 10 ft or more in hydraulic height, or store more than 50 acre-feet of water. However, Section 42-1711, subsection (b), Idaho Code, also indicates that certain structures are not considered dams subject to IDWR regulation under the dam safety statutes. Subsection (2) of Section 42-1711, subsection (b), Idaho Code specifically excludes the following....

Barriers constructed in low risk areas as determined by the director, which impound ten (10) acre-feet or less at maximum water storage elevation, regardless of height.

It appears that due to the water storage facility's relatively small storage capacity (less than one-acre foot) there would be relatively minor damage downstream in the event of a sudden failure of the embankment so the facility would be considered to be constructed in a "low risk area". **Therefore, the structure is not considered a dam subject to IDWR dam safety regulation. However, the storage and use of the water must be in compliance with the various conditions and limitations of water right permit 45-7745.** I have enclosed a copy of this water right permit for your reference.

Although the facility is not regulated as a dam by IDWR, we would recommend that additional freeboard be provided for the embankment. During our field investigation it was discovered that the embankment has a very minimal amount of freeboard (≈ 0.2 feet). Additional freeboard could be provided by some combination of lowering the overflow spillway channel and/or raising the crest elevation of the embankment. Efforts should be made to minimize any potential downstream impact in the event of a sudden failure of the embankment. These efforts could include, but would not necessarily be limited to, ensuring that downstream drainage pipe entrances and channels are kept free of debris and obstructions, keeping the storage facility at lower levels when the ski resort is open for business, ensuring that new development does not occur directly downstream of the facility, etc. Routine maintenance of the embankment including removal of woody growth (trees, willows, brush, etc), eradication of burrowing rodents, erosion control and repair, and other necessary maintenance items should be performed on a routine basis.

If you have any questions, or if I can be of any further assistance, feel free to contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Corey Skinner".

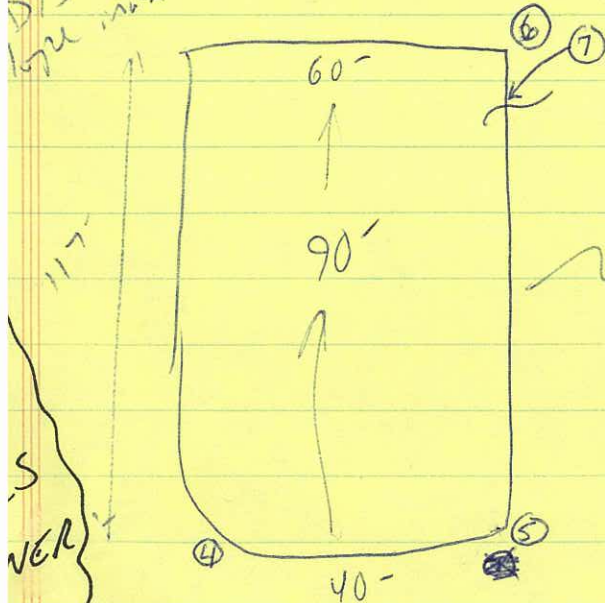
Corey Skinner, PE
Water Resource Engineer

Enclosure

cc: Woody Anderson – Pomerelle Ski Resort
IDWR Water Right Permit 45-7745 File

~~Duwayne~~ Duwayne Kimball
 USFS Kimberly Road
 2647 E Twin Falls, ID 83301

D/S
 1/2" max section



max
 in general
 area
 of
 pad

~ 10 acre

6.5 average

6.5 acre-ft

$$117' \times 50' \times 6.5 = .87 \text{ acre-foot}$$

$$284,445$$

dead tree

1-3

6"

outlet

spillway ~ 1-ft wide
 @ crest

couple 3' inside fence

10' or 50 acre-foot

toe 22.91' (lowest spot)

(2) 125'

(3) 24.67'

corner

(4) top of dam - 3.49'

corner 2

(5) top of dam - 3.16'

(6) far side + 2.69'

hydraulic height

20.3 foot

3.85 - spillway to crest
 (7) 3.67 - crest

3 ft culvert

@

bottom of drainage

6.5

SESE Sec 2
 T13S, R24E