



Dam Safety Section

TRIP REPORT

TO: John Falk, Dam Safety Program Manager
CC: Lyle Swank, Eastern Region Office Manager
FROM: Brian Normandeau, Eastern Region EIT
DATE: 11/28/2017
SUBJECT: Geddes Pond Hazard & Size Assessment

On November 20, 2017 I visited the property owned by Robert and Tamara Geddes located in Section 5, Township 10S, Range 42E, Bear Lake County. The purpose of this visit was to assess the downstream hazard potential and size of the newly constructed reservoir off-channel of Bailey Creek. The Geddes completed a Water Right Transfer earlier this year to allow storage of 0.5 acre-feet (WR 11-7828). A Joint Application for Permits (11-20091) was filed with the Stream Channel Alteration Program, but no permit was required by IDWR. Given the small size of the impoundment, a professional engineered design was not required by the Dam Safety Program (I.C. 42-1712), provided the structure presents a Low Hazard potential to downstream life and property.

The reservoir is positioned slightly uphill to the west of Bailey Creek at 42.58205N, 111.57938W. The embankment appears to have been constructed using general fill material from the area surrounding it and a small borrow pit. Inflow to the pond is controlled by a 10" CMP culvert with a headgate (Photo 3). The water is diverted down a channel into the south end of the pond (Photo 4). All outflow is routed through an uncontrolled earthen channel spillway located towards the northeast end of the reservoir that returns to Bailey Creek (Photos 2a & 2b). At the time of the visit the inflow headgate was closed, and the water level was approximately 8 inches below the spillway crest. The dam height was estimated at 8 feet, with ~2 feet of freeboard. The size of the reservoir appears consistent with the storage volume allowed by the water right. Seepage was noted at the downstream toe, although the water appeared clear. A small channel had been dug to divert seepage away from the toe.

There were no apparent hazards downstream of the structure. Due to the close proximity to Bailey Creek, any uncontrolled release of water would return to the creek. The small volume of water being stored does not indicate a threat to property farther downstream on Bailey Creek. It is my recommendation that this impoundment be considered a Low Hazard, Non-Regulated structure.



Photo 1a: Pond overview facing in a generally northeast direction.



Photo 1b: Pond overview facing in a generally northeast direction.



Photo 2a: Spillway channel towards the northeast end of the reservoir.



Photo 2b: Spillway channel towards the northeast end of the reservoir.



Photo 3: Inlet at Bailey Creek. Arrow points to inlet headgate.



Photo 4: Inlet channel into pond.



Photo 5: Typical view of the dam crest.



Photo 6: Downstream slope of the main embankment (north end), facing east.