



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER
Governor

DAVID R. TUTHILL, JR.
Director

October 31, 2008

ERO Resources
Attn: Norm Young
3314 Grace Street
Boise, ID 83703

RE: FirstFruits Foundation - Permit 72-16625

Mr. Norm Young:

I was charged with the review of the mitigation plan and beneficial use field exam associated with water right permit 72-16625, received by the Idaho Department of Water Resources (the Department) on August 30, 2007. Overall I think that the mitigation plan represents a sound approach to mitigating the consumptive losses associated with the beneficial use of water under this permit. However, there are specific components of the mitigation plan and field exam for which I feel additional information and discussion are warranted before we can proceed with issuing a license. The specific items of my concern are outlined below.

Mitigation Plan

- Your attempt to quantify additional evaporative losses from the pond associated with the use of the fountain(s) are appreciated, and for lack of any other standard guidelines adopted by the Department, I see no reason why they should not be adequate. As a point of professional curiosity and with the intent to possibly use these same guidelines on other unrelated but similar uses, if possible I would very much appreciate a *copy* of the guidelines referenced in the mitigation plan. I attempted to attain the guidelines at the web link referenced in the plan but it is no longer in existence. At the new webpage that has replaced it (www.ncprojectgreen.com) I can find no trace of the document you referenced.
- Under "Component No. 1" of the mitigation plan I could not find any reference of seepage losses associated with the pond. Under "Component No. 2" regarding seepage you state that, "*an estimate for seepage loss is not available, but can be considered negligible because the pond is constructed to limit seepage and the close proximity of the pond to the creek [e]nsures timely return of seepage water to the creek.*" Do you have additional documents or evidence to support this

claim? In what manner has the pond been constructed to limit seepage? Is the pond lined? Does the pond intercept the water table? Is there a direct hydrologic connection between the pond and Garden Creek as evidenced by a correlation in changing water surface elevations between the two water bodies? Is there other direct evidence to support your statement that all seepage water returns to Garden Creek?

- Provision number 4 of Component No. 2 is an effort to provide mitigation water in those times when the mitigating water rights are out-of-priority. This provision proposes drafting the pond to make up for water that is depleted from evaporation, so that the flow rate out of the pond would exceed the flow rates into the pond. Please provide more detail as to how you would propose accurately measuring the complete water balance of the pond. Presumably water meters on all inlets and a check structure at the outlet of the pond would be required to accomplish this task. Per the field exam the outlet works associated with the pond are not sufficient for the adjustment and control of water leaving the pond. These modifications would need to be made prior to approval and verified in a supplemental field exam document.
- Provision number 5 of Component No. 2 is an effort to provide mitigation water from a spring source when the mitigating water rights are out-of-priority and the volume of the pond is depleted to the point that it can no longer provide mitigation as described in provision number 4. Based upon the Findings of Facts number 15 and 16 of the September 3, 2004 Amended Preliminary Order, it seems to be generally accepted that the groundwater and surface water in the Garden Creek drainage are hydraulically connected, and that diverting and consuming spring water would deprive Garden Creek of a current source of ground water recharge. Please provide additional information and data supporting your assumption that the spring(s) are not in hydraulic connectivity with the groundwater or surface water of the Garden Creek drainage. In addition, were this option approved a permanent water measurement device would be required to confirm the flow rate of spring water to the pond. Finally, the preference of the Department is not to issue new permits in which "mitigation" is the authorized beneficial use. The Department generally recognizes mitigation as a *non-use* of water consistent with Idaho Statute §42-223(10); we would recommend changing the beneficial use on the application to reflect the actual use associated with the water diverted to the pond, for example a wildlife, recreation, or aesthetic use.
- It is my understanding that you have submitted an application for transfer (tracking number 74235), in part to accommodate the proposed mitigation for permit 72-16625. Another alternative for consideration would be to add a condition to the license document summarizing the mitigation, and letting the license document and not a transfer document act as the vehicle for modification of the existing water rights for mitigation. The following draft condition is an example of my proposal.

To mitigate for the depletion of water resulting from the use of water under this right and to prevent injury to senior water right holders, the right holder shall cease diverting and using water as authorized by the following water rights for the purposes and amounts specified below. Moreover, the official record of the following water right(s) will be changed to show that diversion and use of water is not authorized because the rights, or portion(s) thereof, are being dedicated to mitigation purposes.

Right No.	Use Changed to Mitigation	Mitigation Rate (CFS)	Mitigation Acres
72-106J	Irrigation	0.01	0.20
72-109J	Irrigation	0.01	0.20
72-4174C	Irrigation	0.01	0.20
72-10486C	Irrigation	0.01	0.20

The land that will no longer be irrigated under these rights is located within the Government Lot 3 (NE¹/₄NW¹/₄) Section 2, Township 13 North, Range 18 East, B.M.

Field Exam

- The upper diversion point is listed on the permit and in the field exam as a point of diversion (POD) for the pond. As such it is required to have a flow measurement device associated with it. However, my understanding from the field exam is that the only water measurement device is at the POD where water is diverted for irrigation (on the north and south side of Garden Creek) as well as for the pond, the flow rate of diverted water at this point is not indicative of the amount of water that reaches the pond. As such, no means of measuring only the water entering the pond via the fountain exists; therefore condition number three of the permit has not been fully met. If my understanding is correct, prior to issuance of an approved water right license a permanent water measurement device will need to be installed and verified in a supplemental field exam document.
- From the "Delivery System Diagram" provided in the field exam it would seem that the lower diversion only provides water to the pond. During the field exam a flow rate of 0.58 CFS was reported at the lower diversion point. This represents a diversion of water almost three times greater than is allowable by the permit. In addition, although no measurement device is available to confirm it, a flow rate of 0.23 CFS has been estimated through the fountain. This would indicate that a combined flow of 0.81 CFS may be routinely diverted to the pond. The Department would appreciate your assistance in making clear to the permit holder that this flow rate exceeds the amount authorized by the permit.

This concludes my review of the mitigation plan and field exam associated with permit 72-16625. Although I appreciate the permit holder's attempts in meeting the spirit of the conditional requirements associated with the permit, they have not technically complied with all aspects of the conditions. Specifically they have not installed all required water measurement devices, nor received approval of a mitigation plan prior to the diversion of water. In light of these matters the Department is going to require proof of full compliance with the conditions of the permit before the permit holder can lawfully divert water next spring (April 1, 2009). Such proof can be submitted in the form of a supplemental field exam document and a revised Mitigation Plan addressing the concerns discussed above. If you have any questions concerning these matters please contact me by telephone at (208) 287-4914 or by electronic mail at mathew.weaver@idwr.idaho.gov for discussion.

Respectfully,

A handwritten signature in black ink, appearing to read 'Mathew Weaver', with a stylized flourish at the end.

Mathew Weaver, PE
Staff Engineer