



RECEIVED
APR 24 2007
IDWR/North

IDAHO DEPARTMENT OF FISH AND GAME
CLEARWATER REGION

3316 16th Street
Lewiston, Idaho 83501

C.L. "Butch" Otter / Governor
Cal Groen / Director

April 17, 2007

Darrel Stuckey
1700 River Drive
Jackson, WY 83001

Dear Mr. Stuckey:

**REFERENCE: APPLICATION FOR A WATER RIGHT APPROPRIATION ON MILL CREEK,
IDAHO COUNTY**

In a letter dated March 7, 2007, IDFG stated that it could not support your request for a water right on Mill Creek as proposed. Subsequently, we discussed your proposal on the phone and a response letter from you; the letter was undated but received March 16.

To recap, IDFG expressed concerns that your proposed development would have adverse impacts on fish and wildlife movement, stream hydrology and water quality. A primary concern was the potential of the pond to increase water temperatures in Mill Creek, which is currently 303(d) listed for temperature exceedances. We also made you aware that you would be required to provide fish passage up and downstream of the dam, per Idaho Code 36-906.

Ray Hennekey, Region 2 environmental staff biologist, met with you and visited the project site in late March to further evaluate your proposal and to discuss our concerns regarding the proposal with you. Based on observations and discussion with you during the site visit, IDFG would be willing to reconsider its opposition to the proposed development, if certain conditions can be met. We offer the following observations and comments:

- Fish Passage: In our letter of 3/7/07 and in subsequent discussions with you, we indicated that you would be required to provide fish passage up and downstream of the proposed project. It was clear from observations during our site visit that the dam, even with the existing breach, was a barrier to fish passage. We surmise that, in all probability, the dam has been a total barrier to fish passage since its construction in the 1930s or '40s. Because of the legacy effect of the dam as a fish barrier and because of the proximity of the dam to the stream headwaters, IDFG will not require fish passage above the dam.
- Wetland impacts: We expressed concern in our letter and discussions that the construction of the pond would eliminate wetland habitat. The old pond site sediment fill now supports a wetland, primarily a cattail dominated marsh, bisected by a re-established stream channel. Your proposal included excavation of all or portions of this wetland to deepen the pond; the raised water level following dam repairs would further reduce shallow water, wetland habitat. During our site visit, we discussed options for pond construction that could help to mitigate for the loss of wetland if the pond is constructed. You were agreeable to a suggestion to pull excavated material to the side and upper end of the pond to use as fill, and shaping that fill to create an extensive shallow water and wetland

Keeping Idaho's Wildlife Heritage

area when the water level is raised following dam repair. Plants from the existing wetland could be saved and replanted into the new shallow water area. In addition, you were agreeable to planting trees and shrubs to diversify the wetland habitat, as well as to provide shade. We believe that this action would create a shallow water/emergent wetland area sufficient to preserve many of the wetland values currently on the site. IDFG habitat biologists can advise you about appropriate native vegetation and can consult with you about appropriate ratios of deep to shallow water/wetland needed to meet those goals. Please note that placing fill below the high water mark in waters or wetlands will require an Army Corps of Engineers §404 permit for the project, and a §401 water quality certification.

- Temperature: The issue of temperature remains more problematic. As we have previously stated, we are especially concerned with the potential for the pond to raise water temperatures in Mill Creek, which has an EPA approved Total Maximum Daily Load (TMDL) for temperature because Mill Creek temperatures are currently too high to support designated beneficial uses. Any increases in temperatures as a result of the pond are unacceptable. And it is reasonable to assume that both increased water surface area and potential reductions of flow resulting from construction of a pond in the stream channel would contribute to increased water temperatures in Mill Creek. Although we believe that it will involve relatively intense planting, increasing riparian vegetation to provide shade for the pond may help mitigate for the increased water surface area. During our site visit, you agreed not only to retain the existing mature trees and shrubs around the pond site, but also said you would be willing to plant additional trees and shrubs to provide additional shade.

Although it is nearly impossible to predict that plantings alone would prevent increases in water temperature downstream, we believe a carefully planned combination of shade plantings and restoration/maintenance of wetland habitat will have benefits for wildlife. However, the project must still comply with the South Fork Clearwater TMDL Implementation Plan developed and managed by the South Fork Clearwater Watershed Advisory Group.

Based on information we obtained from DEQ, the South Fork Clearwater TMDL concludes that heat load reductions (*i.e.*, temperature reductions) are needed throughout watershed tributaries, including Mill Creek, to be able to meet state water quality standards. If constructed, your new pond will increase solar exposure, potentially causing stream temperature increases over TMDL allocations. To provide that there is reasonable assurance that your project would comply with state water quality standards and the Total Maximum Daily Load (TMDL) implementation plan, it will be necessary to monitor stream temperature before, during, and after project completion. If significant stream temperature increases result from the project, then you will be required to mitigate for those increases by providing additional shade restoration throughout the project area and in adjacent areas in order to meet the requirements of the TMDL. DEQ asked that you use native, shade producing woody riparian vegetation recommended by the IDFG; you will also have to document restoration activities for this portion of the project. If the vegetation does not establish within one year of completion of the project, further restoration will be required.

Fish and Game could support pond construction if you meet those conditions outlined by DEQ. We recommend that you contact DEQ to establish monitoring protocols prior to starting any work on the project.

- Flow: As previously stated, the diversion (dam) must also be designed so that sufficient stream flows will be maintained below the dam to support biota, water quality (temperature) and downstream hydrologic functions. This means that flows adequate to meet those needs must be maintained both during construction, while filling the pond, and afterward. Maintaining flows will be especially

critical during low flow periods. During the site visit, you indicated that you have yet to develop the designs/engineering for the dam, but that you believe you will be able to maintain the dam in a manner that outlet stream flow will equal inlet flows. Dam design and operation is outside our expertise, so we have not discussed dam design to accomplish this goal with you; however, we anticipate that you will eventually provide a design, with certification that adequate flows will be maintained.

- Dam design/maintenance: Based on our rough estimate on site, it is possible that the water elevation of the proposed pond will be more than 10' above the toe of the dam. If so, you should contact Idaho Department of Water Resources, Dam Safety Program, which regulates dams over 10'. IDWR Dam Safety staff may also be able to advise you regarding design to maintain flow, etc.
- Fishing: As mentioned during our site visit, it is unlikely that your pond will be suitable for maintaining sport fish. However, if you still intend to consider stocking the pond, your designs must include fish screens to prevent release of fish from the pond. And, again, you will need to obtain stocking permits from IDFG's Lewiston office.

Ultimately, our acceptance of your proposal to repair the dam and impound Mill Creek will depend on the designs you settle on and provide to IDFG, COE, DEQ, IDWR and other agencies, including shape and depth of the pond, plantings, and construction/dam design to ensure adequate flows are maintained at all times. As stated, IDFG can assist you with designing the shape of the pond and selecting suitable plants and planting rates to achieve habitat goals. We cannot, however, offer assistance with all-important dam design; we recommend that you contract a certified engineer for that very critical part of your planning.

Please contact Ray Hennekey, Region 2 environmental staff biologist, for further information or assistance regarding your project.

We want to thank you for your willingness to confer with IDFG to design a project that can meet your needs and desires, as well as to protect wildlife and habitat.

Sincerely,



Jay Crenshaw

Acting Clearwater Regional Supervisor

JC/rh/ss

c: Tracey Trent
Keith Franklin, IDWR
Kerby Cole, DEQ Lewiston