



Environmental Services

9850 64th Street West
University Place, Washington 98467-1078
www.piercecountywa.org/environmental

September 9, 2005
WP53184

Re: Spanaway Creek Fish Ladder
Bresemann Forest Dam
D825-006

Dear Property Owner/Stakeholders:

The Pierce County Department of Public Works and Utilities - Environmental Services, Water Programs Division, as many of you know, is in the preliminary design phase of a proposed project which will provide fish passage upstream of the Bresemann Forest dam on Spanaway Creek located about 1000 ft. north of Military Road on Pierce County Parks and Recreation property.

Many of you attended the public meeting which was held February 9, 2005 where Water Programs presented three Washington Department of Fish and Wildlife (WDFW) options for public comment. Those options were as followed:

1. Removal and Restoration: remove the dam and restore the original creek channel. The pond would be removed with this option.
2. Concrete Fishway: construct one of 2 possible styles of concrete-lined fishways. The pond would remain or be removed depending on which fishway style is chosen.
3. Relocated Outlet Channel: construct a new outlet channel east of the existing dam, leaving the dam and pond in place.

As a result of that meeting, Option 2, the construction of a concrete fishway, was determined to be the favored alternative.

The purpose of this letter is to inform you of a recommended design change based on recent consultations with Thomas Burns, a WDFW Fish Biologist with 20+ years of experience with fishways. Mr. Burns is recommending choosing option 3, new outlet channel, over the fishway option due to long term effectiveness and reduced need for continued maintenance. Our division feels that based on the experience Mr. Burns has, it is prudent to proceed with the advised design option 3, instead of the one that was favored in the public meeting. Water Programs also feels



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that option 3 will prove to be the least troublesome option for obtaining the appropriate permits and thus reducing the risk for delay. This option still supports one of the key concerns for stakeholders of maintaining the existing pond.

This project is still in the early stages of design. It is anticipated that construction of this project will begin in the summer 2006.

If you have any questions, comments or concerns about this new development , please contact me at 798-6165.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Ingo Kuchta".

Ingo Kuchta, Engineer

IK:jd/tr

Attachment

cc: Calvin Goings, Pierce County Councilmember
File



State of Washington
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA

RECEIVED
AUG 30 2005
WATER PROGRAMS

August 29, 2005

Mr. Ingo Kuchta
Pierce County Public Works & Utilities
Water Programs
9850 64th Street West
University Place, WA 98467-1078

Dear Mr. Kutchta,

The purpose of this letter is to summarize our meeting on August 24, 2005 regarding alleviating the fish passage barrier on Spanaway Creek.

The three options discussed included, 1) removal of the dam, 2) a formal fishway and 3) a bypass channel. It was my understanding that the first option, dam removal, was not feasible because of the wishes of the adjacent landowners to retain the character of the 1.5-acre pond impounded by the dam. This leaves the County with either the fishway or bypass option for fish passage correction. Per our discussion, I would recommend against a fishway at this site based on the following:

COST

The construction cost of an acceptable fishway will be significantly higher than a bypass channel at this site (Memorandum dated; February 10, 2004, attached). Additional cost considerations would also include periodic inspections and maintenance.

MAINTENANCE

Fishways by their very nature require constant monitoring and maintenance. If the fishway option were chosen, the County would have to be committed to a weekly inspection and maintenance program to insure passage. Since the site is within a public park, the fishway could be subject to vandalism, e.g., large rocks being thrown in the fishway pools, the removal of stop logs and/or the placement of boards and debris at the fishway exit, all of which would compromise or eliminate fish passage.

LIABILITY

Another issue to consider when considering a formal structure such as a fishway is the issue of liability. People are attracted to fishways and can be hurt or killed by climbing on or playing around such structures, increasing the liability to the County.

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LONGEVITY

The last issue we discussed regarding fishways was longevity or expected life span for the structure. Due to the environment they are placed in, we have found that within 15 – 20 years of construction, major repairs are often required to address such things as concrete spalling, structural deterioration and/or downstream regrade issues that require some form of address. All of which results in major repairs and cost to the owner.

In conclusion, it is my recommendation that Pierce County pursue the bypass channel option to correct the fish passage problem on Spanaway Creek in lieu of removing the dam. I suggest that the County seek out a qualified engineer who has designed such channels. Once a preliminary design is available I suggest you request an engineering review by one of our engineers through Travis Nelson, Area Habitat Biologist within the next few months in order to go to construction during the summer of 2006. Travis can be reached at (253) 848-5133.

Please feel free to contact me at (360) 902-2558 if you require further technical assistance.

Sincerely,



Thomas J. Burns, Fish Biologist
Habitat Program

Attachment

Cc: Don Haring
Mike Barber
Dave King
Travis Nelson
Bob Barnard
Dan Wrye, Pierce County Public Works