

**COUNTY OF MILWAUKEE**  
**Inter-Office Communication**

DATE: March 2, 2009

TO: Committee on Parks, Energy and Environment

FROM: Estabrook Dam Rehabilitation Workgroup

**SUBJECT: Estabrook Dam Rehabilitation Alternatives Analysis**

**BACKGROUND**

On September 26, 2008, the Wisconsin Department of Natural Resources issued an Order to Repair Estabrook Dam (Field File #40.08) that mandated the Parks Department to draw down the dam impoundment by October 5, 2008 so that a professional engineer may inspect the structure and certify and perform the necessary repairs. Until the stoplog repairs have been performed, the Parks Department will not be allowed to refill the dam's impoundment. The order specifically states:

“The owner of the Estabrook Dam shall draw down the impoundment, no later than October 5, 2008, by keeping all gates fully open and secured in place. Prior to draw down, the owner shall provide adequate warning to downstream users such as fishermen standing in the stream or on the banks that the gates will be opened. The impoundment shall not be refilled unless repairs to the stoplog sections are completed.”

The order was delivered to the Parks Department after the 2009 Recommended Capital Improvements Budget was finalized. During the Committee on Finance and Audit's budget deliberations, Supervisor Lipscomb submitted a budget amendment to appropriate \$1.4 million in general obligation bonding for rehabilitation of the dam. This was based on a report by STS, Inc., a consulting firm that had been retained by the County in 2004 to study the condition of the dam. Instead, the Finance and Audit Committee referred this matter to the Department of Administrative Services, Corporation Counsel, County Board and appropriate departmental staff (“Workgroup”) for further review and recommendations as follows:

“The Estabrook Dam Rehabilitation Workgroup shall provide a report to the County Board for consideration at its January 2009 meeting cycle as to the recommended course of action. It is understood that the County may need to take steps in 2009 to comply with the WDNR Order. This may require an amendment to the 2009 general obligation bond issuance to accommodate the

Estabrook Dam Rehabilitation project or the reprioritization of existing or planned capital improvement projects.”

Although funding was not appropriated for the dam repairs, it was understood that general obligation funding could be included in the spring 2009 bond sale. The amount of funding, of course, would be contingent upon the adopted course of action.

## **HISTORY**

As urban development grew along the Milwaukee River near Estabrook Park, annual flooding became an issue for residents. They requested help from the government that would prevent future flooding. A study was subsequently conducted and it was determined that a rock outcrop should be removed. Beginning in 1933, the City of Milwaukee and Milwaukee County jointly embarked on a flood relief project that included removal of portions of the reef within the riverbed in portions of the northwest end of Estabrook Park, which was believed to cause the upstream flooding.

However, residents grew concerned again, after the project’s completion, because the loss of the outcrop resulted in low water levels during stages of ordinary flow. The low water levels impeded the recreational opportunities they had come to expect during certain times of the year. The Estabrook Dam was constructed to maintain water at its previous levels in order to restore recreational opportunities. By this time, Milwaukee County had taken ownership of the City of Milwaukee’s parks, including Estabrook Park.

In 1995 and 2004, the Wisconsin Department of Natural Resources (WDNR) performed routine safety inspections of the dam and identified numerous items needing to be addressed. A WDNR memo dated November 22, 2004 was transmitted to the Parks Director that included a work schedule with a series of deadlines for completing the necessary work. In response, the Parks Department (then merged as the Department of Parks and Public Infrastructure), sought two fund transfers for the preparation of a life cycle analysis of the dam. The request for proposals prepared by the Parks Department stipulated that the successful proposer provide an assessment of, at a minimum, five alternatives including removal of the dam.

Based on feedback from some residents along that stretch of the river that did not want the removal of the dam to be considered, the county supervisor authored, and the County Board approved, a resolution (File No. 05-555) that prevented alternatives related to dam removal from being considered in the life cycle assessment. STS Consultants, LTD, was the selected consultant and performed an assessment of the dam as outlined in its September 8, 2006 report. Per the County Board resolution, the option of removing the dam was not considered and, therefore, costs were not estimated at that time.

The STS report recommended a number of repairs to the dam for a total cost of \$756,000 in 2006 dollars. The repairs included removing and replacing deteriorated concrete on the operating bridge deck, placing additional rip rap downstream of the gated dam structure along the left bank, replacing the overflow spillway flashboards and removing

the large accumulation of woody debris upstream of the fixed crest spillway section. These repairs, along with others identified in the report, were never made.

In addition, STS identified a potential problem with the gated dam structure. The gated structure was analyzed under two conditions: (1) normal pool conditions without ice loading and (2) normal pool conditions with full ice loading. (Normal pool conditions occur when the dam gated structure is closed and water is allowed to pool behind them.) Under scenario 2, the dam-gated structure is not stable enough for full ice loading. Therefore, under full ice loading conditions, the dam gate structure could fail.

STS recommended that the County consider installing heaters or agitators along the upstream side of the gated dam structure to prevent ice build-ups upstream of the gates, if the County desired the spillway to be maintained at full pool. Otherwise, the pool should be drawn down in the winter. The \$756,000 repair cost, which was revised to \$1.4 million in January 2008, does not include these items.

According to the WDNR, most of the repairs identified in the 1995 and 2004 dam safety reports have not been completed.

### **ISSUE & ALTERNATIVES ANALYSIS**

The Estabrook Dam Rehabilitation Workgroup (Workgroup) met with the WDNR on November 18, 2008, to discuss the various issues related to the dam including the operational order and budget amendment. The WDNR expressly stated that they do not have a stance on whether the County chooses to repair or remove the dam. However, should the County make the repairs identified in the work schedule, the WDNR wants assurances that the necessary repairs would be made so as not to cause a safety risk to life and property. In addition, the County must commit to annual maintenance costs of approximately \$50,000 for the dam and impoundment, which would be identified in an operation and maintenance plan.

The WDNR has also verbally stated that the Parks Department may no longer fluctuate the impoundment's water levels. They must remain steady at high, mid-level or low pool in order to minimize negative impacts on the river's ecosystems. In a letter dated October 16, 2007 to the Parks Director, the WDNR requested that the Department evaluate operating the dam other than the current draw and fill mode. Specifically, the memo stated, "As part of the EA [environmental analysis], alternative modes of operation will need to be evaluated beyond the current draw and fill. The DNR recommended the County start to consider long-term operational costs for [these] alternative operating conditions."

#### ***Alternatives Analysis***

Given the aforementioned information, the Workgroup developed four alternatives: Do Nothing, (2) Short-Term Repairs, (3) Short & Long Term Repairs and (4) Dam Removal. The Do Nothing alternative assumes no short or long-term structural repairs would be made to the dam. This is not a realistic alternative because of state statutes regarding the

operation of dams. The Short-Term Repairs alternative assumes that all of the repairs recommended in the STS Report would be completed. The Short & Long Term Repairs alternative assumes the STS recommendations would be implemented, a study on the stabilization of the gated dam structure for full ice loading would be prepared and the structure would be stabilized. Finally, the Dam Removal alternative assumes the dam and related impediments to the free flow of the river would be removed. All of the alternatives include removal of contaminated sediment and debris behind the dam gates.

Each of the four alternatives was evaluated against the following criteria: (1) 20-year life cycle costs for capital construction, (2) 20-year lifecycle costs for maintenance and operations, (3) flooding/hydraulics/hydrology and (4) environmental impacts. The Workgroup also discussed the impact on property values and riparian rights of those properties along the river that might be directly impacted by implementation of the alternatives.

**Alternative One: Do Nothing** – Under this alternative, no structural repairs would be made to the dam. Only annual operating and maintenance would occur, consistent with current practice. The seasonal impoundment fill and draw down operations would also continue.

- a. Capital Costs – No capital costs are required for this alternative.
- b. O & M Costs – Annual O& M would cost \$50,000. Amortized over a 20-year period, the costs would be \$1,000,000.
- c. Flooding - Current practice of drawing down the impoundment during flood events provides little benefit for controlling floods or drainage problems and would continue as such under this alternative.
- d. Environmental Impacts – Seasonal scouring and flushing of contaminated sediment and turbid and eutrophic<sup>1</sup> conditions during full-pool in the summer would continue. Negative impacts on wetlands and wildlife would continue as a result of seasonal hydrological alternations due to the filling and drawing down of the impoundment. Fish passage would be negatively impacted during full pool periods seasonally. Continued raising and lowering of the dam gates to anticipate flood events would continue to stir sediments and flush them downstream.

**NOTE:** While we have identified “Do Nothing” as an alternative, it is not a valid one because the WDNR has stated (in Attachment A) that, per state statutes, they would issue an Administrative Order directing the dam owner to comply with the orders for repair or removal of the structure because the dam cannot remain in a state of disrepair or be

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<sup>1</sup> The process by which a body of water becomes enriched in dissolved nutrients (such as phosphates) that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen.

abandoned in place. This is consistent with Chapter 31 of the Wisconsin State statutes regarding the regulation of dams and bridges affecting navigable waters.

**Alternative Two: Short-Term Repairs** – This alternative assumes implementation of repairs specified in the STS, Inc. report dated September 8, 2006, and mandated by the WDNR. However, it does not include structural stabilization of the gated dam structure to handle full pool ice loads. Therefore, the gates would need to be opened in fall and remain open until spring, which is contrary to the requirement by the WDNR to evaluate alternative modes of operation beyond the current draw and fill. Sediment management would be required (same as in Alternatives Three and Four).

- a. Capital Costs – Short-term repair costs are estimated at \$1.4 million in order to achieve the dam's 20-year life expectancy (over and above operation and maintenance costs). Amortized over 20 years, this capital cost would be \$2.18 million. An additional \$1,000,000 in cash financing would be required for sediment removal.
- b. Annual O&M would cost \$75,000. Amortized over a 20-year period, the costs would be \$1,500,000.
- c. Flooding – Under full or low pool, the dam provides little to no benefit for controlling floods or drainage problems and would continue as such under this alternative. Alternatively, under low pool does not exacerbate flooding up or downstream.
- d. Environmental Impacts – Seasonal scouring and flushing of accumulated polluted sediment would greatly reduce. However, in the long-term, polluted sediment will accumulate in the impoundment at increasing rates. Turbid and eutrophic conditions during full-pool in the summer would continue. If the impoundment remained at full pool, local wetland hydrology would be maintained and herptiles and invertebrates would be prevented from freeze-outs and desiccation. Fish passage would be negatively impacted during full pool periods seasonally.

**NOTE:** This is not an option if the impoundment were to be at full-pool annually because the gated dam structure is unstable.

**Alternative Three: Short & Long-Term Repairs** – This alternative assumes implementation of repairs specified in the STS report would be made. In addition, the stabilization of the gated spillway would be studied and recommended repairs made accordingly.

- a. Capital Costs - This is the most costly alternative as it would require additional repair work beyond that required in Alternative Two and a study to determine the best course of action for stabilizing the gated spillway. There would be additional costs for stabilization. Total amortized cost for completing the repairs identified

in the STS report, performing an additional study and stabilizing the dam are estimated to be between \$3.5 million and \$6.5 million. Of those costs that would be bond eligible, amortized costs over 20 years would be \$5.13 million to \$9.55 million. An additional \$1,000,000 in cash financing would be required for sediment removal. This option does not include the cost of building a fish “ladder.”

- b. Annual O& M would cost \$75,000. Amortized over a 20-year period, the costs would be \$1,500,000.
- c. Flooding – Assuming operation of the dam at full pool year-round, it provides little to no benefit for controlling floods or drainage problems.
- d. Environmental Impacts – Seasonal scouring and flushing of accumulated contaminated sediment would be greatly reduced. However, in the long-term, polluted sediment will accumulate in the impoundment at increasing rates. Turbid and eutrophic conditions during full-pool in the summer would continue. If the impoundment remained at full pool, local wetland hydrology would be maintained and herptiles and invertebrates would be prevented from freeze-outs and dry-outs. Fish passage would be negatively impacted during full pool periods seasonally.

**Alternative Four: Dam Removal** – This alternative assumes that the Estabrook Dam would be completely removed, including the gated control structure and fixed crest spillway, and a free flow condition would be created.

- a. Capital Costs – Cost for removal is estimated at \$1.02 million. It likely that this project is not bond-eligible and would require cash financing. An additional \$1,000,000 in cash financing would be required for sediment removal.
- b. O & M Costs - \$0.
- c. Flooding – Removing the dam will not have any negative impact on current flood elevations or drainage problems along the river. Dam removal would actually result in the greatest reduction in flood elevations along the river upstream from the dam.
- d. Environmental Impacts – Free-flow conditions will maintain natural wetland hydrology and, therefore, not negatively impact herptiles and invertebrates and may result in a net gain of wetland acreage. All barriers to fish movement along the Milwaukee River and Lake Michigan would be removed.

	<b>Alternative One: Do Nothing</b>	<b>Alternative Two: Short-Term Repairs</b>	<b>Alternative Three: Long-Term Repairs</b>	<b>Alternative Four: Remove Dam</b>
<b>O &amp; M Costs</b>				
Annual	\$50,000	\$75,000	\$75,000	\$0
Amortized Over 20 Years	\$1,000,000	\$1,500,000	\$1,500,000	\$0
<b>Capital Costs</b>				
Construction	\$0	\$1,400,000	\$3.4M - \$6.4 M	\$1,020,000
Consultant Study			\$100,000	
<u>Sediment Management</u>		<u>\$1,000,000</u>	<u>\$1,000,000</u>	<u>\$1,000,000</u>
Total		\$2,400,000	\$4.5M-\$7.5M	\$2,020,000
Amortized Over 20 Years	\$0	\$3,180,000	\$5,130,000-\$9,550,000	\$0
<b>Totals</b>	<b>\$1,000,000</b>	<b>\$4,680,000</b>	<b>\$7,730,000 - \$12,150,000</b>	<b>\$2,020,000</b>

*\*Please see matrix in Attachment B for more details.*

### ***Riparian Rights***

Because of the various questions and general misunderstanding of riparian rights as defined in Wisconsin state statutes, the Workgroup sought and received clarification from Corporation Counsel on this matter as it relates to the Milwaukee River within the vicinity of the Estabrook Dam.

Corporation Counsel informed the Workgroup that, under Wisconsin law, the state owns the beds of all navigable waters (i.e. lakes) with the exception of navigable streams. Riparian owners own the beds underlying navigable streams up to the center of the stream. Riparian rights include the use of the shoreline, the reasonable use of the water, and the right to build piers for navigation. Thus the riparian owners in the vicinity of Estabrook Dam own to the middle of the streambed and are, therefore, responsible for any contamination and are required to report, investigate and clean up the contamination. Also, when conflicts arise between riparian rights and the public rights of non-riparians, riparian rights are secondary to the public interest. Implementation of any one of the four alternatives would not change the status and rights (and obligations) of riparian owners.

### ***Property Values***

The Workgroup requested information from the County's Real Estate Manager on the possible effects of each alternative on property values along Milwaukee River from the Estabrook Dam north to approximately Glendale Avenue in the City of Glendale. According to real estate records, when considering the property values (exclusive of improvements) land values along that section of the river are, on average, \$10,000 more than those one to two blocks inland. Therefore, the condition of the river, as it exists today, has little to no impact on property values.

University of Wisconsin-Madison researchers conducted an empirical analysis of property values near dams in 2006. According to the findings, property values increased

slightly subsequent to dam removals throughout Wisconsin. This was the case after removal of the North Avenue Dam.

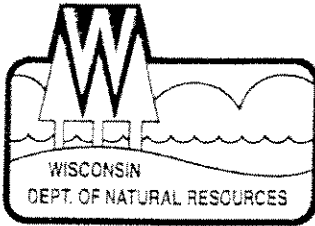
Based on this information, the Workgroup determined that impacts on property values as related to each alternative is impossible to quantify. However, it is safe to conclude that any impact, negative or positive, would be negligible (best case or worst case). It is more of an emotional factor for those who have lived along river and are accustomed to experiencing the river certain aesthetic and recreational ways, depending upon the season.

### **CONCLUSION**

Regardless of the alternative ultimately chosen, it is prudent for the County Board to make a decision soon. The costs of each alternative will only increase if a decision is delayed. There may also be significant cost savings to the County if action is taken quickly. If Alternatives One, Two or Three are selected, funding for annual operation and maintenance must be dedicated for these purposes.

cc: Milwaukee County Board of Supervisors  
Terry Cooley, County Board, Chief of Staff  
County Executive Scott Walker  
Tom Nardelli, County Executive's Office, Chief of Staff  
Sue Black, Director, Department of Parks, Recreation and Culture  
Cindy Archer, Director, Department of Administrative Services  
Steve Kreklow, DAS-Fiscal and Budget Administrator  
Craig Dillmann, DAS-Economic Development  
Bill Domina, Corporation Counsel  
Jack Takerian, Interim Director, Department of Transportation and Public Works  
Greg High, Director, DTPW-Architectural, Engineering and Environmental Services  
Pamela Bryant, DAS - Capital Finance Manager  
Julie Esch, County Board Senior Legislative Research Analyst  
Kevin Haley, Parks Department Landscape Architect  
James Keegan, Parks Department-Planning & Public Policy  
John Schapekahn, Principal Assistant-Corporation Counsel  
Karl Stave, DTPW-Architectural, Engineering and Environmental Services





State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Matthew J. Frank, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
Milwaukee, Wisconsin 53212-3128  
FAX 414-263-8606  
Telephone 414-263-8500  
TTY Access via relay - 711

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SEP 30 2008

MILWAUKEE COUNTY  
PARK SYSTEM

September 26, 2008

FILE REF: 8600

Ms. Sue Black, Director  
Milwaukee County Parks  
9480 Watertown Plank Road  
Wauwatosa, WI 53226

Subject: Order to Repair the Estabrook Dam, Field File #40.08

Dear Ms. Black

The attached order to repair the Estabrook Dam describes recent observations of structural damage. This order establishes:

- A deadline for initiating a draw down of the Estabrook dam to inspect the structure
- A requirement that a registered engineer complete an inspection and certify the plan for repairs
- A requirement that the dam not be refilled until the dam repairs are completed

Jim Keegan and other member of your staff met with me at the dam site to review the situation and we discussed the specifics contained in this order. The missing and damaged stop logs may be indicative of other structural problems. This Order applies to September 2008 observations at the dam. The outstanding maintenance and repair requirements as listed in the October 16, 2007 work schedule still need to be addressed.

I am available to approve the plans and specifications for the repairs. If you have any questions regarding this order, or are unsure on how to proceed, please contact me at (414) 263-8641.

Sincerely,

Tanya L. Meyer  
Water Management Engineer  
Milwaukee Service Center

CC: Jim Keegan – Milwaukee County Parks  
Brian Zimmerman – Milwaukee County Parks  
Bill Sturtevant, P.E. - WDNR GEF II, WT/3  
Jim McNelly – WDNR Milwaukee  
Sharon Gayan – WDNR Milwaukee



Milwaukee County  
Department of Parks, Recreation and Culture

I N T E R - O F F I C E   C O M M U N I C A T I O N

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Date: September 30, 2008

To: George Torres, Director, Department of Transportation and Public Works

From: Sue Black, Director, Department of Parks, Recreation and Culture

**Subject: Estabrook Dam**

Per our discussion, I have attached a copy of the State of Wisconsin, Department of Natural Resources "Order to Repair the Estabrook Dam, Field File #40.08" for your review.

As a result of this order, I am requesting that you assign a registered engineer from the Architectural and Engineering Services Division to assist the Parks Department in preparing plans for the repair of the stop-log structure.

Please let me know if you have any questions.

Sincerely,

Sue Black,  
Parks Director

cc: County Executive Scott Walker  
Chairman Lee Holloway, County Board of Supervisors  
Thomas Nardelli, Chief of Staff, County Executive's Office  
Cynthia Archer, DAS Director



Milwaukee County  
**PARKS**

**Milwaukee County**  
**Department of Parks, Recreation and Culture**  
Scott Walker, County Executive • Sue Black, Director

September 30, 2008

Ms. Tanya Meyer  
Wisconsin Department of Natural Resources  
2300 N. Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212

Subject: Order to Repair Estabrook Dam, Field File #40.08

Dear Ms. Meyer,

On September 30, 2008 the Milwaukee County Parks Department received, by U.S. Mail, your order in reference to the repairs of the Fixed Crest Spillway on the Estabrook Dam.

At this time, the Cities of Milwaukee and Glendale have been notified that the drawdown of the impoundment will begin on October 5, 2008 and the dam is being visually inspected three times per day by Parks Staff.

I have requested that a registered engineer from the Department of Transportation and Public Works, Architectural and Engineering Services Division, be assigned to assist the Parks Department in preparing plans for the repair of the stop-log structure that will be submitted to your agency for review.

*people that fish*  
I am concerned that we are not giving the ~~fisherman~~ and adjacent landowners a 2-week notice, as we have in the past, of the drawdown of the impoundment.

Therefore, we will begin a slow drawdown of the impoundment on October 5, 2008 thus allowing fisherman and landowners time to adjust for this change in the river.

Please let me know if you have any questions.

Sincerely,

Sue Black,  
Parks Director

cc: County Executive Scott Walker

Address  
One Wisconsin Park Road  
Milwaukee, WI 53226

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(414) 257-6000 (ext. 1237)  
fax: (414) 257-6100

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**Milwaukee County  
PARKS**

**Milwaukee County  
Department of Parks, Recreation and Culture**  
Scott Walker, County Executive • Sue Black, Director

Gloria McCutcheon, DNR SE Region Director  
Chairman Lee Holloway, County Board of Supervisors  
Thomas Nardelli, Chief of Staff, County Executive's Office  
Cynthia Archer, DAS Director  
Supervisor Gerry Broderick,  
Supervisor Theo Lippscomb  
Julie Esch, County Board Research Analyst  
Vince Masterson, DAS Budget Analyst

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**Address**

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ph 414 237-PARK (7275)  
fx 414 237-1300

**email**

[parks@milwaukee.gov](mailto:parks@milwaukee.gov)

**website**

[county.parks.com](http://county.parks.com)

**BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES**

IN THE MATTER of the Unsafe Condition of the  
Estabrook Dam, Located on the Milwaukee River,  
Milwaukee County.

**ORDER FOR DAM REPAIR**

**FINDINGS OF FACT**

The Department finds that:

1. The Estabrook Dam is located on the Milwaukee River in the Northwest Quarter of the Northeast Quarter of Section 5, Township 7 North, Range 22 East, in the Cities of Glendale and Milwaukee, Milwaukee County. The Estabrook Dams impounds the Milwaukee River.
2. The Estabrook Dam is currently owned by Milwaukee County, 9480 Watertown Plank Road, Wauwatosa, WI 53226.
3. On September 25, 2008, Department personnel investigated the Estabrook Dam to assess possible damage to a section of the fixed crest spillway. The dam was determined to have stoplogs missing from one section of the fixed crest spillway.
4. County staff informed the Department they observed the missing stoplogs on September 1-2, 2008 and the conditions at the dam have not changed substantially since that time.
5. The dam in its present condition is not sufficiently strong, and is unsafe, and dangerous to life, health and property.

**CONCLUSIONS OF LAW**

The Department concludes that:

1. The Department of Natural Resources has authority pursuant to sections 31.02 and 31.19, Wisconsin Statutes to inspect or cause an inspection to be made of any dam or reservoir.
2. The Department of Natural Resources has authority pursuant to sections 31.02 and 31.19, Wisconsin Statutes to order alterations and repairs to any dam that is not sufficiently strong or is unsafe, and that is dangerous to life, health and property.
3. The Department of Natural Resources has authority pursuant to sections 31.02 and 31.19, Wisconsin Statutes to order the draw down of the impoundment above a dam that is not sufficiently strong or is unsafe, and that is dangerous to life, health and property.

**ORDER**

It is therefore ordered that:

1. The owner of the Estabrook Dam shall draw down the impoundment, no later than October 5, 2008, by keeping all gates fully open and secured in place. Prior to draw down, the owner shall provide adequate warning to downstream users such as fishermen standing in the stream or on the banks that the gates will be opened. The impoundment shall not be refilled unless repairs to the stoplog sections are completed.

2. The owner shall inspect the dam several times daily and complete an inspection log until the draw down is complete. If any changes are observed, the dam owner should immediately contact the Field Dam Safety Engineer at (414) 263-8641 to reassess the situation. Depending on conditions, an immediate draw down of the impoundment may be required.
3. The owner of Estabrook Dam shall engage the services of a professional engineer registered in the State of Wisconsin to submit plans for the stoplog repairs by November 15, 2008 to the Department for review and approval. All other stoplog sections shall be inspected for soundness and included in the plans for repair, as needed.
4. Upon approval of the plans and specifications by the Department, the owner shall make repairs in accordance with the approved plans and specifications. The owner should also provide the Department with documentation and photographs demonstrating that the work has been completed in accordance with the approved plans and specifications.

#### NOTICE OF APPEAL RIGHTS

If you believe that you have the right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to s.227.42, Wis. Stats., you have 30 days after the decision is mailed or otherwise served by the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

This decision was mailed on September 26, 2008

#### STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

For the Secretary

By Tanya L. Meyer

Tanya L. Meyer  
Water Management Engineer

Sept 26, 2008

Date