2200 N 64 St
Wauwatosa, Wi 53213
March 22, 2016

Kristina Betzoid
Wisconsin Department of Natural Resources
2300 N. Dr Martin Luther King Dr.
Milwaukee, Wisconsin 53212

Dear Ms Betzoid:

I am unable to attend the Public Hearing scheduled for March 22, 2016 regarding the Estabrook Dam repair, but I would like to express my view about the future of the Dam.

I understand that the Dam was built in 1930 which makes it over 80 years old. Since it has not been properly maintained over the past years it will probably require a great deal of repair, possibly beyond the present estimate of $6 million in the next 20 years. By that time it will be over 100 years old. I question whether this is good use of my tax dollars.

To remove the Dam will cost about $1.7million and eliminate the cost of operation of the gates and maintenance. I am interested in this issue because tax payers' assessments will be used. I would much prefer that my money be put into the parks and the repair of the Domes. I believe tax money should be used for projects which serve the whole community. This project serves a small number of residents who enjoy the boating and water activities in the artificial Lake created by the Dam. I can appreciate their desire to continue having this amenity, but feel strongly that the decision to use tax payer money does not respect the Common Good purpose of taxation.

Aside from the high cost of repair removing the Dam will return the river to it's original flow and will benefit fish and other aquatic life and leave us with a healthier River with less chance of flooding.

I also respect the expert opinions of The Milwaukee County Parks, Director of Emergency Management, and Engineers who have studied the issue and recommend removal.

Thank you for considering my opinion.

Sincerely
Erika M. Voss

2025 E. Greenwich Avenue, Apt. 2
Milwaukee, WI 53211
March 30, 2016

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

Dear Ms. Betzold:

RE: WDNR Must Consider Removing the Estabrook Dam

The WDNR needs to conduct a **COMPREHENSIVE** review of the environmental and socioeconomic impacts of **ALL** alternatives regarding the future of the Estabrook Dam; otherwise, the EIS would not be complete and comprehensive.

Due to the large amount of state and federal funds likely to be spent on Estabrook Dam, the WDNR cannot only consider Milwaukee County's preferred alternative of dam repair and associated operational scenarios when conducting an EIS. The Estabrook Dam currently degrades the health of the Milwaukee River, impedes fish movement, increases flood risk for homeowners who live upstream of the dam, and poses a risk to public safety and will continue to do so to an even greater extent if repaired. Milwaukee County has a failed history of properly maintaining and operating this dam, and the stakes get higher as the dam continues to age and degrade.

Without considering dam removal as a viable alternative, the WDNR is not doing its duty to protect our natural resources and to make informed management decisions that best protect the environment and the community.

Removing the Estabrook Dam would:

1. Improve water quality in the Milwaukee River and Milwaukee River Estuary,
2. Improve fish passage and increase recreational fishing opportunities,
3. Reduce flood and safety risk, and
4. Save Milwaukee County residents at least more than $4 million over the next 20 years.

Therefore, I urge the WDNR to recommend removing the Estabrook Dam located on the Milwaukee River in Glendale.

Thank you.

Sincerely,

Dianne Halligan

Dianne Halligan

Estabrook Dam Public hearing comments

Tuesday, March 22, 2016

Marcus Crawford

865-West Montclaire Ave

Glendale, Wisconsin

414-964-5040

crawford@etfwisdom.com

My name is Mark Crawford, our family lives at 865 West Montclaire Ave, Glendale Wisconsin.

Our family owns the largest track of land [one acre] on the Milwaukee River, and, as far as I know, we pay the highest property tax in Glendale for Milwaukee River residents. Our river land is sacred, as is the Milwaukee River; we have 60 different species or trees, an arboretum yard, hundreds of different birds, otters, beavers, bee hives, a pond, and a spring bubbling from the ground. Who here has a percolating spring?

We live on an ancient beach that in the 1800's was a Potawatomie Indian village thriving in times of Jesus Christ and the Roman Empire. We celebrate the Milwaukee River's birth every year; a birthdate preceding the melting of the last great glacier; a time 10,000 years ago; a time before texting and human narcissism. A time before today's dysfunctional democracy; a time before failed, visionless politicians. A time before rabble-rousing, loud-mouthed, small-minded, boot-licking pontoon boaters and water-skiers haphazardly stumbled upon Milwaukee River's glaciated shores.

The Glaciers were cold; but not as cold as today's political discussions. Glaciers speak the truth about Earth's temperature, Earth's fevers and distempers. Proponents of Estabrook Dam speak truthless and mindless Estabrook fictions. These mindless fictions are scattered about; like the millions of concrete fragments littering Glendale's River shorelines.

In Glendale, the Milwaukee River was channelized with concrete from "Streets of Old Milwaukee". Shoreline river concrete dumping was perpetrated secretly by commercial haulers. Like ants building hives, the haulers hauled until the Milwaukee River screamed "no more".

There were no cameras. The haulers drove away without remembrances or guilt, without moral conscience, civil duty or semblance of recordkeeping.

They drove away Sandhill Cranes, Great Blue Herons and Sturgeons. They drove away glaciated shorelines. They drove away beauty. They introduced the aesthetics of shoreline "ugly".

There is a historic link between Estabrook Dam and concrete channelizing the Milwaukee River in Glendale.

How do we know that Frankenstein, the monster with destructive force, won't eventually bankrupt and destroy Milwaukee County Parks Department? How many lawyers will dance on Milwaukee Park's pin head?

Now let's ask questions about motorboats and motoring. Who will promulgate rules and regulations? What political entity has justification? Why should we trust them? Who will enforce the enforcers? Will enforcement be secret or part of a Milwaukee County social media program? Will closed-circuit television surveillance cameras and security cameras be installed along the flooded river? When a Glendale pontoon boat collides with a Shorewood speed boat, should the Glendale Police and EMT Department be called, or the Shorewood Department? Will Sherriff Clarke show up wearing his hat, sporting a fishing pole? Who will pay for police emergency boats? Who will pay wages and pensions? Will police rescue boaters from air boats? What role will the DNR play? Have you ever spotted a DNR warden on the shores of the Milwaukee River? Will self-driving autonomous boats be allowed? Will boaters be allowed to launch drones from their pontoon boats? Who will collect the thousands of pounds of plastic, plastic bags, glass jars, and paper products tossed into the river by negligent boaters? Will Milwaukee County Citizens be allowed to live in house boats? Would boaters be allowed to use the flooded Milwaukee River has a race track? Would boaters have to register their boats annually? Should boaters annually pay user fees as reimbursement to Milwaukee County for its Estabrook Dam annual operating expenses? How would Milwaukee County Parks Department compensate rivers owners for breach of privacy and noise intrusion? Does the Milwaukee County Parks Department have legal and ethical responsibility to provide an equivalent U.S. Coast Guard service?

Secondly, the *intention* of Milwaukee County Parks and Milwaukee County is to construct a new fish passage and continuously monitor and operate this fish passage by manipulating Estabrook Dam gates like a carburetor manipulating gas flow in an internal combustion engine. Also, the ***intention*** of Milwaukee County Parks is to manipulate Estabrook Dam gates as a read and react response to ever changing water flows and weather conditions. The operation of an all-season Estabrook Dam amounts to a continuous juggling act of tossing risk balls in the air and eternally keeping the balls juggled. Even the most proficient and highest paid juggler drops the ball. Gravity and fatigue take a toll.

Should the Milwaukee County Parks Department invest in robots using artificial intelligence? Aren't robots and artificial intelligence fatigue proof? If not robots, then how many human operators are needed? How many Estabrook Dam operators will it take to screw in one LED bulb? Who pays their wages and pensions? What if it's raining upstream and the operator downstream reads and reacts to weather conditions too late or too early? What if the gate operators, like the command and control operators at the U.S. nuclear ballistic missile launching sites, operate Estabrook Dam under the influence of cocaine or opiates? What if the gates need to be quickly opened or closed and the electronics fail? What if the mechanical devices fail? What happens in an electrical blackout? What happens when the back-up generator doesn't work or doesn't start? Who manages this complex operating system? Will it be operated remotely? Is Milwaukee's Downtown prepared for a giant tsunami wave? Is Jones Island prepared for an upstream tsunami wave? When the Dam gates misfire, and the Milwaukee River floods north from Estabrook Dam to Kletzsch Park, ravaging property and homes, who writes the compensation checks? Does anybody in this far-flung Dam scheme go to jail? What if cyber-terrorist hacks the Dam software, opens the gates, flooding Downtown properties? Would Estabrook Dam be hardened and secured from criminal activity? How many surveillance cameras would it take to secure Estabrook? Why should we trust jugglers juggling?

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Stephanie Sandy

Address: 3332 S Pennsylvania Ave
Milwaukee WI 53207

Phone: 414-483-5820

E-mail: ssandy@wi.rr.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Remove the dam.
It makes environmental sense, it makes economic sense.
The majority of Milwaukee taxpayers support removal.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: James Stratte

Address: 6300 N. Santa Monica Blvd
Whitefish Bay, WI 53217

Phone: (414) 963-1215

E-mail: jim@boxelderinc.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Over the past two to three years, I have kayaked the Milwaukee River from Glendale (through the dam) all the way to Wisconsin Avenue. The river is beautiful — without the dam. Lincoln Park is beautiful enough with the river. We don't need a lake. We especially don't need a lake that becomes a hot spot for toxic chemicals, as it has been in the past.

In the future Fresh Water Capital that Milwaukee wants to be, we really should make the right decision for the environment and for water quality and that is:

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Remove the dam!

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Lexie Abrahamsen

Address: 8202 N Regent Rd
Fox Point, WI 53217

Phone: (414) 534-0462

E-mail: lexie.abrahamsen@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov* *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I attend Nicolet High School and am an advocate for the removal of the Estabrook Dam. Science classes at my school use the river as a resource to teach students about ecology and environmental science. The educational possibilities could be immensely expanded with the complete restoration of the Milwaukee River. Students could watch the return of native species over the years and learn about the healing capabilities of nature.

Additional sheets are included: ____ Yes __X__ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: STEVEN BRENGOSZ

Address: 6867 N. 91 ST

MILWAUKEE, WI 53224

Phone: 414 353-9026

E-mail: restart414@earthlink.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I SUPPORT REMOVAL OF THE ESTABROOK DAM. I FEEL THE ENVIRONMENTAL BENEFITS TO THE RIVER AND POPULATION AS WELL AS FLORA & FAUNA. I FEEL RECREATIONAL USES WILL BE MORE VARIED & ENHANCED I ALSO DOUBT THAT PROPERTY VALUES WILL BE AFFECTED BY THE LOSS OF THE "LAKE". PROPERTIES WILL STILL BE ON WATER I SUSPECT DATA FROM OTHER LOCAL DAM REMOVALS WILL SHOW NO VALUE DROP. I HAVE OVER THE YEARS SEEN VERY LITTLE TO ANY BOAT TRAFFIC ON THIS SECTION OF RIVER TO JUSTIFY THE DAM REPLACEMENT. IT IS ALSO WELL KNOWN THAT MKE COUNTY HAS HISTORICALLY HAD PROBLEMS FUNDING PARKS. I FEEL THEY WILL NOT HAVE THE FUNDS TO PROPERLY OPERATE & MAINTAIN THE DAM.

(OVER)

Additional sheets are included: ____ Yes ____ No

(OVER)

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Barbara Jakopac
3124 S. 40th Street,
Milwaukee, WI 53215
(414) 384-4487

* I am shocked that I read the repairs are going forward. Why are we having this listening session if the decision has already been made??

*Going ahead with repair is a reckless use of taxpayer $$

I don't support rebuilding the dam.

A Few Key Reasons for Dam Removal:

- For safety reasons. Dams are under the constant pressures of water and time and gradually deteriorate. As a result, many of Wisconsin's dams have not been properly maintained and are now public safety hazards. The DNR is responsible for dam inspections, enforcing compliance with safety standards, and for issuing repair and removal orders.
- To save money. In Wisconsin, repairing a dam typically costs 3 to 5 times more than the cost of removal. The on-going costs of maintenance, repairs, operation, liability, and dredging the impoundment further increases the true cost of a dam.

To restore recreational and natural values. Dams severely fragment river ecosystems, degrade water quality and devastate fisheries. In fact, the DNR has identified dams as one of the biggest threats to Wisconsin's aquatic biodiversity. Dam removal re-creates recreational and aesthetic opportunities — from canoeing and kayaking to fishing and wildlife watching. Restoring the land flooded by dams can also create great parks and wildlife habitats.

Feb. 15, 2016

Dear Supervisor Lipscomb,

I write you as a constituent of Milwaukee County to urge you to stop any proceedings to repair of the Easterbrook Dam and just tear it down. This Dam will require not only substantial taxpayer dollars to repair, but continual taxpayer dollars to maintain it. In my view and the view of numerous environmental and individual taxpayers this is a waste of our hard earned tax dollars given the now more immediate concern and need to repair to the Milwaukee county Domes. The Domes provide a greater recreational, aesthetic, educational and agricultural benefits, not only for our citizens, but the thousands of visitors nationally and internationally who visit our great city. The dam benefits a tiny few. It has been an eye sore and serves no purpose than to provide a very few citizens with access to the river. These are stringent times where tax dollars are needed to be spent for the good of the whole rather than the few.

From an environmental standpoint the river needs to continue it's natural flow. The removal of the North Avenue dam years ago substantiates the reality that a river is healthier and the water quality substantially better when a river is in a natural flow. Not only is the water quality better, but the aquatic life forms can flourish and pursue their natural course. You can see a healthier and cleaner river since that dam was

removed. You can also observe a river that has had tremendous increase in recreational activities for all citizens as a result.

Salmon fishing is a tremendous economic contributor to Milwaukee and the Great Lakes. Yet this dam hinders and may even prevent this species from proliferating. This has a dire effect on an industry which produces thousands of dollars for the Milwaukee economy. The fish must and should have access to the upper levels of the river to provide adequate spawning environment. You know this to be true as experts have given testimony to that fact. I have fished the river in the spring and fall during the salmon runs. I have fished just below the dam and could have walked across the river an the backs of dead and dying fish. A fish ladder, which has been suggested, will not accommodate the numbers. Another point, opening up the river will provide greater fishing opportunities for anglers up river. Again as a positive economic and recreational resource.

I urge you not to be short sighted. Take down the Easterbrook Dam and allow the Milwaukee River to run free.

You immediate attention to this matter is requested.

Yours truly,

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Paula Anderson

Address: 4685 N. Wilshire Rd
WFB, WI 53211

Phone: 414-964-7047

E-mail: andersonpaula01@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I believe the dam should be removed as proposed by all agencies committed to river revitalization and the quality of Lake Michigan.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

State?

Rock ramps - dts - Lincoln Park Friends

From:

Name: Scott Stiz

Address: + Address

Remove dam

I've seen it work

Phone:

Spray, colored lights

E-mail:

1986 - Mayor Maier

$1 M on

dam repair

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

O. Milw River belongs to all of us who live up or down stream.

1, Lived by Milw R. North Av. for ~~30~~ 25 yrs.

1989 - 2. Adv of drawdown became clear a few years after - a stagnant, fish-killed pool held back by a decaying + expensive dam was replaced by a clear-flowing river - This change was opposed by many, including some ~~d~~ Ald. Stamwd. 25 yrs later - a once-controversial change has become the right thing to do

I hope some common-sense environmentalism will flow upstream to Glendale + that the dam will eventually be demolished to return this river to its natural state.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Martha Spencer

Address: 6116 N. Sunny Point Rd.
Glendale, WI

Phone: 414.870.3104

E-mail: marthaspencer@sbcglobal.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

The research shows that 300 Glendale property owners currently in the flood plain will benefit by removal of the dam. We may even have our properties removed from the flood plain. Given Milwaukee County's inability to ~~&~~ maintain other assets such as the Domes, ~~there~~ should be adequate funds to not only build the dam but ~~make~~ take emergency management action needed during flooding events to prevent flooding to properties like mine or to maintain the dam for the next 50 years. ~~Lacking~~ I support dam removal.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Demaris Kenwood

Address: 5720 N. Bay Ridge Ave
Whitefish Bay, WI 53217

Phone: 414 967 5966

E-mail: pandimai@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please remove the dam for the following reasons:

- it would impore the health and flow of the Milwaukee River for residents, fish and wildlife.
- removal would cost less than repair and maintenance
- removal would reduce risk of flooding for residents
- ~~ham~~ the dam serves no public purpose so county funds should not be used for private home owner purposes.

Thank you.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Joyce Bell

Address: 1524 N. 51st St

Milwaukee, WI 53208

Phone: 414-453-0868

E-mail: joycebell@inbox.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please do not repair the Estabrook Dam, and remove the dam. Use the money to repair the Domes instead.

Thanks.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Margaret McGuire

Address: 2530 N. 96th St.
Wauwatosa 53226

Phone: 414-453-0953

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please take it down! Be fiscally responsible.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: CHRISTOPHER M. VERNON

Address: 4111 N. PROSPECT AVENUE

SHOREWOOD, WI 53211

Phone: 414-331-2444

E-mail: Kitvernon@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

~~PLEASE~~ THE COUNTY BOARD SHOULD REVERSE ITS DECISION TO REBUILD THE DAM. IT IS A VERY EXPENSIVE BOONDOGGLE THAT:

1) WASTES MILLIONS OF SCARCE TAX DOLLARS
2) FLIES IN THE FACE OF SCIENTIFIC EVIDENCE AND OF PUBLIC OPINION.
3) FAVORS THE INTEREST OF A VERY FEW PEOPLE AND FORCES THE REST OF US TO PAY FOR SOMETHING WE ~~DON~~ FEEL IS WORTHLESS
4) THERE ARE MANY MORE WORTHWHILE PROJECTS WHERE THE MONEY ~~COULD~~ SHOULD BE SPENT!

Additional sheets are included: ____ Yes ___X___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 22, 2016

Greetings,

My name is Harold Schmidt and I am the chairperson for The Friends of Estabrook Park (FOE). Our group functions under the auspices of The Park People and is dedicated to the protection and preservation of Estabrook Park. Several years ago, FOE took a position opposed to reconstruction of the Estabrook Dam. This past year that position was reaffirmed. We believe that removal of the dam will be good for Estabrook Park, good for the health of the river, and better for the taxpayers of Milwaukee County.

The Friends of Estabrook Park urge the Wisconsin DNR and the Milwaukee County Parks to table the proposal to repair the dam in favor of deconstructing it. Please take out the dam.

Sincerely,

Harold Schmidt

Chair, Friends of Estabrook Park

414-759-4786

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Margot Fuchs

Address: 6501 N. Greenbay

Glendale, WI 53209

Phone: 414-352-0531

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

1st the pond is ugly
& drive over the river on Bender 3-5X a week
& enjoy seeing the free flowing sparkling
river.

2nd keeping the dam is expensive & will be
with upkeep. There are greater needs for the county
the domes - roads - parks.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Melinda Vernon

Address: 4111 N. Prospect Ave.

Shorewood, WI 53211

Phone: 414-627-2444

E-mail: melindajvernon@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

PLEASE ask the County Board to reconsider their decision to rebuild the dam. It needs to be torn down. The financial facts alone are compelling. However to disregard the will of the scientific community and the vast majority of the public in favor of a handful of affected property owners is irresponsible and just plain wrong. Please ask the County Board to do the right thing and vote in favor of our natural environment. Thank you.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: John Jansen

Address: 7819 N. Rockledge Ave.
Glendale, WI 53209

Phone: _____

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

County Supervisor Theo Lipscomb told me personally about 5 years ago that he is emotionally attached to the Estabrook Dam because his father or grandfather was once in charge of the dam's operation. What a poor reason to support the maintenance of a financial boondoggle that can, at most, benefit a few dozen residents. I have canoed directly upstream from this dam for 30 years and I can say unequivocally that the river level now (with the dam gates open) is canoeable all summer long. Please do not let a few hundred vocal residents who have been led astray by Sup. Lipscomb prevent you from removing this dam.

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

J Jansen

March 21, 2016

WI DNR

Kristina Bedsold

2300 North Martin Luther King Drive

Milwaukee, WI 53212

Dear Ms. Bedsold:

I'm writing this letter to show my support for repairing the Estabrook Dam along with supporting a partial winter draw-down.

Reasons being:

- Construction and repair costs have been completely distorted.
- The Urban Ecology Center usage for children's activities has been discontinued.
- Milwaukee River clean-up investment was between 30-50 million dollars so people could enjoy this recreational (impoundment) area. The Blatz Pavillion was once a popular swimming hole on the Milwaukee River.
- Removal of the Dam proposes a serious risk to flooding. The Army Corps of Engineering rebuilt the dam for this prevention some eighty (80) years ago.
- Present low water levels create warmer water affecting loss of wild life.
- Why are maintenance costs for operating the Dam so high if the gates are manual?

Thank you,

Thomas J Ramstack

Ms. Kristina Betzold
Department of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, WI 53212

725 W. Fairfield Ct.
Glendale, Wis. 53217
March 26, 2016

Subject: Estabrook Dam

Dear Ms. Betzold:

I have been a Milwaukee County resident since 1956. I am not a riparian owner. However, my family enjoyed skating in front of the Blatz pavilion years ago and many years of canoeing in Lincoln Park made possible by the Estabrook Dam.

The Estabrook Dam was built to return the water level in Lincoln Park to its natural level at the time the park was created in 1907. This was necessary as the river channel was straightened and lowered by blasting out the bedrock river bottom as a Civilian Conservation Corp Project.

Improvements along the river have been made in recognition of the historic water level maintained for over 100 years. Maintaining the water level contributes to the ambiance of Lincoln Park and enables additional recreation opportunities in an urban area.

Many dams are maintained to provide recreational opportunities. Repairing the dam is necessary for Lincoln Park to again provide greater water activities for county citizens.

I encourage issuance of necessary permits so work can start as quickly as possible.

Sincerely,

John G. Mulhern

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave

Glendale, Wisconsin 53217

Phone: 262 751 2215

E-mail:

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

False, ~~an~~ Exaggerated and Expensive Advertising to satisfy a few weed lovers, bug lovers, mosquito (nile) infested parks is so shameful, unhealthy to our city, Lincoln Park, the businesses and average and below income levels ~~along of media~~ of residence who live along the river. Not wanting to exclude others outside the 53217 area. Everyone uses this river. Everyone from all walks of life uses and enjoy the river. It exposes, educates and provides recreational use immensely. The public will be handed a disservice if dam is taken down. A reminder False, expensive Advertising is doing the public cont. →

Additional sheets are included: X Yes ___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave
Glendale, WI, 53217

Phone: (262) 751 2215

E-mail:

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

harm by misguiding the public and using public position) to advertise a political view. Just do the right thing for everyone When the City of Milw. and its Counties voted for the Stadium. I supported it. (I personally have never used it) The Surrounding properties profited. Shall I start balking that they all are millionaires? Just like the claim they made about homes and businesses in Glendale along the Milw River being all millionaires. I thought with good reason the stadium would be good for Milw. and all citizens alike. Ignore the "Riverkeepers, nothing but a thorn and a cost to all.

Additional sheets are included: ____ Yes ____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: DAVE DORNER

Address: 849 W. MONTCLAIRE AVE
GLENDALE, WI 53217

Phone: 414 964 3215

E-mail: DDORNER@AOL.COM

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I'VE HAD THE OPPORTUNITY TO PREVIEW THE FISH PASSAGE DESIGN AND HAVE COMPARED THE USGS FLOW DATA UPSTREAM OF THE DAM WITH OPEN CHANNEL FLOW OVER WEIR CHARTS AND I SAY THAT THE DESIGN IS VERY GOOD

Additional sheets are included: ____ Yes X No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 22, 2016

I want to submit my support for the repair of the Estabrook Dam with winter drawdown.

I am an environmentalist. I've been a member of the Sierra Club since 1978, and have held many positions in that organization including State Chairman of the Illinois Chapter for several years. I am also a member of Milwaukee River Keepers. I have read everything I can find supporting the repair and the demolition of the dam. There is science that supports keeping the dam that deserves as much consideration as the science the supports the removal of the dam but I will leave that to those with more credentials.

What I want to address is my personal observation of what we have lost in the past five years and what we can have again. I moved to Glendale in 2005. I am one of the "well to do residents" (according to one very arrogant politician) who lives on the river. During the first two years we lived here we saw many, many canoeists going past our house. There were groups of kids from the city every weekend who were learning to appreciate nature and enjoy the outdoors in a very healthy way. The year the dam was left open, all that stopped. For the past five years we have seen a handful of canoeist the whole summer. We used to canoe ourselves but the only water our canoes saw last year was from the rain that fell. The water is either too low making canoeing impossible without damaging the bottom of the canoe or it's in flood stage with trees, branches and debris floating down making it extremely dangerous.

The river is a unique recreation opportunity that Milwaukee County has to offer it's residents. The price tag for repairing the dam and installing gates for drawdown are so insignificant compared to the stadium that is being built that serves only those wealthy enough to afford the high priced ticket and parking to attend an event. The river is there for all to enjoy for free for fishing, canoeing, boating, swimming and even water skiing. Lincoln Park Lake is a treasure that makes Milwaukee County a great place to live. A billion dollar stadium cannot replace that, only proper dam repair can fix what the past County Superintendents have neglected and allowed to fall into such disrepair that we have come to this point.

Evan Emmons
1011 W. Montclaire Ave
Glendale, WI

Eemmons414@aol.com

I AM GLAD TO HEAR THE DECISION FINALLY HAS BEEN MADE TO REPAIR THE ESTABROOK DAM.

I have lived on Eula Court, in Glendale since 1989. My daughter grew up enjoying summer fun on Before the late 1980s, I lived on Island Drive in Mequon, where we also ~~the~~ enjoyed the Milwaukee River. Island Drive consisted of six houses and Milw. we were surrounded by the river. We had a canoe, kayaks and River. snowmobiles that we bought for fun on the river. We even had a neighbor with a ~~small~~ SEA plane that would land on the river. When we moved to Glendale so our daughter could attend Nicolet, we bought another house near the river for the beauty and fun on the water.

Not so long ago, If you looked along the shoreline, you would see boat houses with boats in them, pontoon boats, canoes, kayaks, a big water trampoline and skidoos. **But not anymore**. One couple, Chip and Laura Gall, would eat dinner on their pontoon boat with their 4 kids whenever possible in the summer. They had to sell the pontoon boat for next to nothing because they couldn't use it anymore nor could they get it out of the water. That was an interesting "extraction" when the buyer came to pick up the boat with some construction equipment in tow.

Our little residential area near Lincoln Park gets overlooked and often the short end of the stick. For instance there's that big GREEN sound barrier along I-43 just south of Hampton. ~~Was that the only color of paint they had left when it was time to paint the wall?~~ Other areas of the freeway have very tasteful, natural color walls, but not in our area!

By Sprecher Brewery, there's that I-43 bridge over Glendale Avenue. Walking along Glendale Avenue, you see there are no lights like other bridges, losts of broken glass, weeds, rocks. It's totally unkempt. Thank you very much.

All last summer we watched the construction on the other side of the river. Trucks, dust. They even worked weekends, when we just wanted to kick-back and enjoy the peaceful river view!

And now the dam – this has greatly affected the lifestyle of my family and my neighbors on the river. This *long-drawn out decision* of whether or not to repair the dam and all the controversy is wearing on us.

~~Obviously~~ there aren't many constituents in this area along the river who truly care about repairing the dam and a partial winter drawdown, ~~and this dam project seems to be an easy target to save money to spend on other projects with higher visibility.~~ I am here to urge County Executive, Chris Abele and the DNR to repair the Estabrook Dam ~~and~~ restore the summer fun to our riverside neighbors.

AS CTY EXEC IS OFTEN ASSISTED

I'M CURIOUS TO KNOW HOW THEY WILL MAINTAIN THE WATER LEVEL. IF WE STILL CANNOT BOAT ON THE RIVER, WHO DO WE CALL?

and continue the partial winter drawdown OF THE RIVER. ONLY THIS WILL

DO WE START THIS PROCESS ALL OVER AGAIN.

Respectfully Submitted –

Susan Kipp
819 W. Eula Court
Glendale 53209

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Deb Walser

Address: 802 W. Rock Place
Glendale, WI 53209

Phone: 414-961-0787

E-mail: deb.walser@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Get the dam repaired Quickly.
The Board approved repair of the dam. Why are there so many delays? Repair the dam and move on to other issues. For 16 years we have paid higher taxes for having property on the river. We should be able to use the river recreationally! We cannot in its current condition - the Algae at Summer is terrible! Fix the dam. Restore the Water levels. And explain to me in an email Why this is taking so long!!!

Additional sheets are included: ✓ Yes ___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

thank You.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: CHARLES Richard

Address: 1141 W. MONTCLAIRE AV

GLENDALE WI 53217

Phone: 414-721-8817

E-mail: CHAS5152@ATT.NET

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

It is a shame on what a handful of people are doing to push on destoring the dam, making false statements and data. The worst part of their campaing is making this debate political for county elections.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

(COPY)

March 29, 2016

Kristina Betzold
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee, WI 53212

Dear Ms. Betzold,

On March 22nd last, my husband and I attended yet another hearing regarding the Estabrook Dam, and we listened carefully to the various speakers presenting "reasons" for and against the dam.

It is difficult to understand why one single concept has been so completely neglected and ignored by both of the seemingly intelligent sides in this controversy.

Now that the North Avenue Dam is long gone, the Estabrook Dam is the last remaining place where the natural debris and man-made contaminates may be trapped and removed most economically from the river from time to time. It should be obvious that this approach is far less costly than trying to fish out the styrofoam cup or massive tree trunk one piece at-a-time down in the harbor or lake. It should be obvious that it will be far less expensive to dredge the sediment that will settle to the bottom in the "lake" immediately behind the dam, as opposed to downstream in the harbor and Lake Michigan. This is what rivers do – they move huge amounts of material downstream. We understand that in the relatively recent past it cost approximately $22,000,000.00 to dredge and clean up just a few blocks of the Kinnickinnic River, which is a much smaller watershed.

The Milwaukee River is quite young, geologically speaking. In less than ten thousand years, it has scoured a huge, Grand Canyon-like gorge from near the dam to the downtown area and Lake Michigan. All of that sediment that was previously in that Gorge has been eroded and moved downstream. If not dredged out of the lower river and harbor, the sediment will eventually silt up. The silting will continue out into Lake Michigan, the source of our drinking water. We should be grateful for our dam, which allowed sediments and contaminates to settle and be recently removed before reaching Lake Michigan.

The bedrock that was removed in the 1930's had previously created the so-called "Lake" upstream of the Estabrook Dam, at the same elevation as the dam does now when the gates are closed. That effectively stemmed the ongoing eroding of river banks and bottom from progressing farther upstream. We no longer have that protective bedrock, but we do have the stopping capacity of our Estabrook Dam. If it is now removed, we lose our ability to trap and remove future sediment, debris and

contaminates. In addition to the sedimentation and contamination, it is only a matter of time before an unsuspecting boater crashes into a three foot-in-diameter tree trunk down in the harbor inside the breakwater. That tree trunk would likely have originated upstream of the Estabrook Dam and could have been caught and removed.

No one has correctly anticipated all of the huge, ongoing costs and consequences of dam removal. Apparently no one is able to see this whole picture clearly except a very few of us.

I hope to have shed some light on this subject that previously has not been considered. I hope that you and the DNR will now support efforts to preserve the Estabrook Dam with an adjustable as necessary water level. Please allow us to repair!

Sincerely,

Diane Kuesel

Diane L. Kuesel

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Horner

Address: 1005 W. Mont Claire

Glendale, Wis, 53217

Phone: 262-751-2215

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov or,*
- Add additional pages of information and send in a stamped envelope to:
  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212
- Comments must be received by April 6, 2016

Comments on the DEIS:

I voted in support of Milw Stadium
I'm a voter remember that
You have allocated funds

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave

Glendale, Wisc, 53217

Phone: 262 751 2215

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

If you build it they will come!

6

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Ken Dondero

Address: 1035 W. Mont Claire Ave
Glendale, Wisc, 53217

Phone: (414) 962-8247

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

If you build it
they will come!!

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Comment regarding the Draft Environmental Impact Statement dated approximately March, 2016 for the proposed repair of the Estabrook Dam in Milwaukee County.

I am in favor of repairing the dam.

With respect to the alternatives presented for an operational order I am generally in favor of Alternative #2- Partial Winter Drawdown Operation. However, no valid reason has been offered by previous draft EAs and the EIR as to the timing of the drawdown. The dEIS notes potential impacts on spawning runs and mussels associated with the proposed timing of Alternative #2. I suggest that any such impacts could be mitigated with a more reasonable timing of the drawdown. Since I live on the river a short distance upstream of the dam I have firsthand experience as to conditions on the river. I see no valid reason to draw down the impoundment as early as September 15. It is unreasonable to believe that such an early date is necessary to mitigate ice problems. More reasonable dates would be November 1 November 15, or possibly even December 1. The same concept applies to the seasonal end of the proposed drawdown. The drawdown could easily be ended by April 15 and still have the same effectiveness at mitigating ice issues.

Better still would be to allow flexibility in the timing and exact manner of the drawdown. I am not familiar with the exact timing of the various fish runs. It seems to me that they are not determined by a specific date on the calendar. Therefore it would seem most beneficial to begin the drawdown after the last run in the fall if at all possible. The same idea would also apply in spring. If there are known fish runs in early spring, then it seems that the end of the drawdown should begin before such time if possible. If not possible to time the drawdown season to fully accommodate fish runs, it would seem that past practice of opening one or 2 of the gates partially to facilitate such runs could be easily achieved and allowed and provided for as a part of the operational order.

When the dam was originally built, there had been a recent history of large flooding events occurring in March that were associated with the buildup of ice on the river in conjunction with rain events and the beginning of thawing of such ice. It seems readily apparent that a study of such events could easily be done with the goal of achieving a better proposed date for ending the drawdown than the seemingly arbitrary date proposed. I believe the conclusion of such a study would be that significant flooding events exacerbated by ice have generally not happened beyond April 1 and likely have never happened beyond April 15. Now there is recent history of 5 and 10 year flooding events occurring in April. These recent events have not been associated with significant ice buildup factors, to my knowledge. So it could be that ending of the drawdown in April would also then cause the need to open the gates for rain events in April. Again, a competent and objective study of such events would surely lead to a logical conclusion that would call for ending the drawdown significantly earlier than May 15 and perhaps as early as April 1.

Better still would be to allow the beginning and end of the drawdown to be determined on a seasonal basis, within established time windows, but based on actual current weather factors and other actual current circumstances such as fish runs.

not "normal" conditions. Therefore it was and is perfectly within reason and lawful under the permit to open some or all of the gates when there is flood potential and for purpose of preventing ice damming. There are also records suggesting that the seasonal drawdown has been occurring since at least 1969. Historic records and photographs demonstrate that full pond conditions during winter months led to severe ice dam problems. These problems required emergency action including dynamite blasting of ice dams. The operational protocol proposed by MRPA recommended a partial winter drawdown that begins later in the year than recent practice. This protocol would alleviate spring thaw and ice dam flooding concerns while minimizing adverse biological effects of seasonal drawdown. This protocol will also have biological benefits over continuous full pool operation. I have made suggestions recommending a similar protocol above.

Furthermore, contrary to the vague statement regarding correspondence of 1986 being the first such correspondence, I am attaching correspondence from 1983 acknowledging the seasonal drawdown. (42)

The statement that the "river morphology never included a widening or 'natural-lake-like' feature" is not supported by the facts and should be removed.

The area upstream of the present dam did consist of a lake –like area previous to excavation of the river bed which was begun in 1933. True, the central channel through Lincoln Park did not exist, however a lake-like condition of deeper and slower moving water did exist due to the existence of a substantial rock ledge in the river channel in the vicinity of Port Washington Road. The documents provided in Attachment 2 of the EIR clearly state that the removal of the rock ledge was begun in 1933. Another document states that the removal was 50% complete by August, 1935. The 1937 aerial photograph provided which purports to prove that a lake –like condition did not exist was taken after the vast majority of the natural rock dam that previously existed and created the lake–like condition had been removed. The letter dated 9-1-39 that is included in Attachment 2 of the EIR clearly states that the dam was built to maintain a water level equal to the level that existed prior to removal of the rock ledge, as does the document included in Attachment 2 titled "Estabrook Park Dam". Both of these documents refer to the pre-existing portion of river as a "body of still water." MRPA has provided numerous further documents proving the existence of a lake-like condition and that the purpose of the dam is to maintain the natural historic water level. (1-4,6)Yet, none of these documents were ~~been~~ included in the EIR. The 1940 Wisconsin Planning Board Bulleting referred to in this section clearly states that the capacity of the channel must never be reduced, yet this entire document* is clearly biased in favor of dam removal- which would substantially reduce the capacity of the channel.

*the EIR

There are problems with the hydraulic analyses conducted by SEWRPC. All of the 100 yr elevations portrayed in the SEWRPC analysis were higher than those portrayed in a similar study of the area performed by FEMA and completed in 2008. SEWRPC was asked for an explanation of this difference and their answer was essentially that the lake infill that has occurred since then due

*"This entire document" referred originally to draft EA of 2014-2015. For purposes of this comment, it applies to the EIR but not to the dEIS.
-Pk

According to Memorandum Report 172, a 1 % probability flood at the Estabrook Gauge has a flow of 14,800 CFS. According to USGS,NWS and FEMA data, on June 21, 1997 this gauge read 10 feet and the flow was 16,500 CFS. This flood is also documented in Memorandum Reprort 172. By adding 10 feet to the gauge height, this would indicate that this larger than a 100 yr flood had an elevation of 617.23, NGVD29.

Memorandum Report 172 states that the elevation for a 1 % flood at mile 6.829, just above Estabrook Dam, is 620.46. The analysis for the EA states that the elevation for a 1 % flood at the same point with a repaired dam is 620.68. Both studies state that the elevation for a 1% flood at mile 6.827, just below Estabrook Dam is 619.23. I am not sure of the exact location of the gauge, but according to USGS it is about 1200 feet downstream of the dam. This would put it at approvimately mile 6.60. The EA analysis does not include elevations for anything downstream of 6.827, but the Memorandum Report 172 does. The 1 % elevation at mile 6.61 is 618.45 and at 6.567 it is 617.63.

So, how is it that your 1 % flood elevations are approximately one foot higher than the actual measured elevation of a flood that was larger than a 1 % flood? "

A. "We have field checked the location of USGS gage 04087000 and confirmed that the gage house and the published coordinates are located between Milwaukee River model cross-sections RM 6.567 and RM 6.610 downstream from Estabrook dam. Based on the USGS 04087000 stage-discharge rating curve, a flow of 14,800 cfs (100-year flow) would result in a stage of approximately 616.7 feet above NGVD29. At the location of the coordinates of USGS 04087000, the 100-year stage of the FEMA FIS effective model and the model reflected in SEWRPC MR No. 172 would be about 618.0 feet above NGVD29. This difference is a reasonable correlation and calibration between modeled and measured data. In addition, this difference between the modeled and measured stage downstream of the dam would not be realized in the reaches of interest upstream of the dam due to the hydraulic effects of the dam structures."

It would seem readily apparent that a 1 foot discrepancy between actual and modeled conditions is of utmost significance, especially when the actual condition shows actual flood elevations to be significantly lower than those claimed by FEMA and accordingly, SEWRPC.

So, the SEWRPC analysis when viewed in light of the FEMA analysis shows that:

1. The entire model is flawed because it does not accurately predict actual events
2. Within the flawed model, the model shows that in-growth due to the prolonged drawdown has increased 100 yr flood elevations.

It would then follow that upon permanent dam removal, according to these models, further increase to the 100 yr elevations can be expected and that such elevations may eventually increase beyond the established limits. (16)

necessary, what proof is there that movement beyond the supposed barrier is necessary? There is no substantial evidence that impacts of the dam under any of the proposed operational alternatives would have such an impact on fish and mussels as to require removal of the dam.

Repectfully Submitted this 6th day of April, 2016, by

Brian Kreuziger
706 West Rock Place
Glendale, WI 53209

References

1. Ullius, F.W., Special Assistant Engineer, Civil Works Administration, City of Milwaukee. *Letter to Mr. D.S Teter, Project Engineer*, April 23, 1934.
2. Author unknown, possibly Milwaukee County Parks Department, Proposed Dam, Estabrook Park, Milwaukee County. Alternate title: Job 8. Form 7 No.122 Estabrook Park SP-5, Circa. April, 1937, Appears to be the final proposal submitted to the PSC as part of the dam permit approval process. Refers to CCC camp SP-5, which was the Estabrook Park camp and appears to have been accompanied by an April, 1937 approving document of an engineer that names several regional and state governmental authorities.
3. Johnstone, L.I., Assoc. Engineer, Field Technician's Comment, April 19, 1937.
4. Milwaukee County Park Commission, Estabrook Park Layout Plan for Milwaukee River Channel Deepening. December 6, 1933, approved January, 1934.
5. Public Service Commission of Wisconsin, In the matter of the application of Milwaukee County to construct, operate and maintain a damin the Milwaukee River near the City of Milwaukee, to be known as Estabrook Park Dam, for the purpose of flood control, maintaining normal water level under normal conditions,and to provide recreational facilities and to remove rock ledge in river bed above dam in aid of flood control and navigation., May 26, 1937
6. A. Glamm, F.C., Progress Report Bureau of Engineers Project 40-B14-106 Month of August, 1935, August, 1935. Accompanied by:
   B. Unknown Author, W.E.R.A. Proj. #40-B14-105 July 16,1935 Removing Rock-Milwaukee River, July 16, 1935

10. Warzyn, Will. Statement at Milwaukee County Parks, Energy and Environment Committee meeting. March 24, 2009.

11. Mussels of the Milwaukee River Greenway: A Preliminary Survey, Gary S. Casper, Great Lakes Ecological Services, LLC; and Jason M. Dare, Dare Ecosystem Management, LLC, March 6, 2013.

April 5, 2016
Herbert W. Oechler

Kristina Betzold
Wis. Dept. of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, Wis. 53212

Subject - Estabrook Dam, EIS statement

Dear Ms. Betzold,

This letter is a follow-up to the information DNR Hearing at the Glen Hills School a few weeks ago. I am a Board Member of the South East Wis. Chapter of Trout Unlimited which has a membership of about 1,900. Our Board and most of our members favor removal of the Dam for reasons enumerated as follows.

1. The best fish passage is a free flowing river without a costly "stair step" artificial structure.
2. A free flowing river will diminish accumulation of silt. A costly removal of toxic silt was recently undertaken in the Lincoln Park area above the Dam.
3. If given a chance and improving water quality free flowing rivers heal themselves.
4. Removal enhances flood control and reduces liability for the Dam owners. (Milwaukee Co.)
5. Water above the Dam is subject to excess warming in the Summer which increases algae blooms

6. Removal of the North Avenue Dam several years ago was a remarkable success.
7. Motorized boat traffic in the impoundment creates wave action which erodes the shoreline.
8. Repair is costly and maintenance over the life of the Dam is estimated at $150,000 – $160,000 per year.
9. In our high tax state and our high tax county the cost of repair is a major concern to Milwaukee Co. residents who do not live above the dam.
10. The major beneficiaries of repair are residents along the upstream impoundment which has poor access.
11. A free flowing Milwaukee River will provide canoeing, kayaking, fishing and nature watching for far more people than live along the upstream banks.
12. Removal could "free up" money to help our "cash strapped" Milwaukee Co. Parks System.

Thank you for your consideration and please forgive my penmanship.

Sincerely,

Herbert W Oechler

Herbert W Oechler
8220 Harwood Ave. # 138
Wauwatosa, Wi. 53213

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Sonya Baime

Address: 1100 West River Park Lane
Glendale WI 53209

Phone: 414 961 0229

E-mail: cert by sonya@wi.rr.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 29, 2016

Kristina Betzold
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee, WI 53212

Dear Ms. Betzold,

This letter concerns the Estabrook Dam controversy. I hope that you will actually read it as opposed to just tabulating "for or against".

Both sides have neglected or deliberately ignored a number of very important facts: The original purposes for the Dam and the downstream consequences of Dam removal.

The letter dated March 29, 2016, written by my wife Diane, (copy enclosed) attempts to clearly demonstrate the real and true downstream consequences and huge subsequent costs of dam removal. Those costs will be on-going forever and paid by all taxpayers regardless of where they live and reside. The future cost savings of Dam preservation will accrue to all taxpayers and especially those who use and drink Lake Michigan water.

The Dam, and its adjustable gates, was a remedial project built after the old "backwards S" course of the river through Lincoln Park was modified to improve flow and diminish ice jamming that had previously been an upstream annual flooding event. Additionally, the dam was built after the enormous Bedrock removal project of the CCC upstream in the 1930's. The removed natural bedrock had previously given us some benefits and some disadvantages. Before the Bedrock removal, the river was held to a level twelve months of the year that was at the same level as the Dam affords now with the ten gates closed. The bedrock was a natural dam that results in the so-called "lake". The advantage this gave us was a basin in which sedimentation from upstream could settle to the bottom and not be flushed downstream to Lake Michigan.

Additionally, the bedrock armor stopped the enlargement of the deep gorge in which the river flows from the Dam to Lake Michigan. With the bedrock removed, the river would have continued to erode and the gorge would have continued to march upstream farther and farther much like Niagara Falls is doing between Lakes Erie and Ontario.

The Estabrook Dam gives us the best of numerous worlds as the wise designers intended. With the gates closed part of the year, we have "natural", original upstream water levels which give us an outstanding recreational facility as well as the mentioned settling basin for sediment collection as necessary.

We should rejoice that we have had the Dam in place to "catch" the PCB's and other toxic material (as well as the tree trunks) before they pollute Lake Michigan and our drinking water supply.

We should rejoice that our Dam has prevented millions of cubic yards of natural sedimentation from reaching the Harbor and Lake Michigan where the costs of dredging and filtering are too huge to predict and measure.

We should rejoice that our Dam has prevented transmission of an untolled amount of man-made debris and natural floating wood from reaching the harbor for MMSD to worry about removing before a boating or other tragic occurrence.

Eric Reinelt, my colleague and the former Director of the Port of Milwaukee, was adamant about preserving the Estabrook Dam to prevent transmission of all material to the harbor and into the lake. He could not be present to voice this position at an early hearing held at the Milwaukee Transit Center. However, he did sent a subordinate to express that preservation posture regarding the dam.

All of the removal advocates cite very noble sounding reasons for dam removal which seems to be gaining in popularity amongst so-called conservationists and their various groups. However, the concepts and facts presented in this letter are either intentionally or unintentionally ignored and omitted from their propaganda.

The people who designed and built the Estabrook Dam and reconfiguration of Lincoln Park were not fools. They had the wisdom to know that not all dams are bad. They had the wisdom to implement a facility that would reduce the prior flooding problems upstream of a huge magnitude in 1924 and earlier years.

Please do not impede the repair of the Estabrook Dam! Give it and all of us a chance to benefit from and enjoy all of the positive advantages it was designed to give. If we maintain it, future generations will thank us! Your representatives have told us that the decision to repair or remove is a local Milwaukee County Board matter. We have previously complied and voted to repair. Please allow us to proceed!

Very Truly Yours,

Scott C. Kuesel

P.S. The Friends of Kletzsch Park recently passed a resolution endorsing repair of the Estabrook Dam and Kletzsch Part Waterfall.

Enclosure

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Tom Chapman

Address: 4525 N. Larkin St.
Shorewood WI 53211

Phone: 414 963 0616

E-mail: tomchapman3@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

The draft EIS is not robust enough to identify the environmental impacts of all alternatives. For instance, the only alternative that lowers flood stage is dam removal. Any alternative that raises flood stage will not only impact flooding of homes but will also add unintended flood water into the MMSD system through floor drains. Even small stage increases of 3-6 inches could send thousands of gallons of floodwater into the sewerage system. This impact is not addressed in the EIS. Dam removal improves water quality, improves habitat, eliminates sediment accumulation, least costly and has no annual operations and maintence costs. Please add all the environmental impacts into a more robust EIS.

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: David Thomas

Address: 635 W. Montclaire

Phone: 414-344-1044

E-mail: david@thomewald.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

See attached written statement

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Friends of Lincoln Park Statement on the Estabrook Dam.

While the Dam is most often associated with Estabrook Park, its greatest impact is in Lincoln Park just above the Dam. We've had an opportunity to experience Lincoln Park with its full-pond lake of over 100 acres. And in the last 6 years, we've experienced it with no dam in place.

Lincoln Park is a place much like Milwaukee, where rivers meet. It has over 4 miles of shoreline, numerous islands, wetlands and diverse wildlife that includes beavers, mink, otters, muskrats, herons, multiple varieties of turtles, hawks, owls and much more. We urge everyone to get into a canoe or kayak and explore what is very nearly an urban paddler's paradise.

The Friends of Lincoln Park includes in its vision statement that we "promote appreciation for our rivers and accessibility for safe and quiet water recreation".

After the construction of the Dam in 1937, channels in Lincoln Park were widened from a width of about 150 feet to what is now over 1200 feet at its widest, if you combine the width of the three channels that go through the park. This area made up the lake that residents knew and used for about 70 years. Let me just explain what happens to the river in Lincoln Park when the dam is open. There is a water level gage just below the dam that paddlers commonly use to determine paddling conditions. The river at the Estabrook gage in the summer averages around 2 feet and the river is 130 feet wide at the gage. In a channel that ranges from 1200 to 600 feet wide, that makes the average water depth in the Lincoln Park channel between 3 and 5 inches. This makes for a lot of getting out and pulling your boat across sand bars. Sometimes, when the gage drops to 1.6 feet or less, paddlers know that it's futile to even try to get through the park. While "Swimmable" waters may be decades away, you are never going to swim in waters that are 3-5 inches deep.

The board of directors of the Friends of Lincoln Park has discussed the impacts of various decisions and makes this statement:

We urge the community and Milwaukee County to consider our belief that with the dam removed, with no effort to remediate water levels in Lincoln Park, paddling for novice or learning paddlers (youth, in particular), is very difficult. It's for this reason that we have advocated for the community to consider Option 3a, the lower-level impoundment created by a natural looking rock-ramp. This option was outlined in the county's draft EIS but got lost in everyone's scramble to take sides. Folks, it does not have to be just "Dam or No Dam" There are alternatives that would satisfy some of the needs of both

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Barry Stuart

Address: 1755 N. Cambridge Ave. Apt 103
Milwaukee WI 53202-1824

Phone: (414) 224-6165 (W) (414) 736-8352 (M)

E-mail: bstuartemke@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I hear dam removal will reduce bluegill populations. Will that be due to increased predation by fish like salmon and steelhead or increased competition by yellow perch?

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

Kevin L. Shafer, P.E.
Executive Director

March 23, 2016

Kristina Betzhold
Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, WI 53212

Subject: Estabrook Dam Rehabilitation and Operation Draft Environmental Impact Statement

Dear Ms Betzhold:

One of the missions of the Milwaukee Metropolitan Sewerage District (District) is to reduce flood risks in its tributary communities. Flooding directly causes property damage, economic losses, and adverse health effects. In addition, when structures are flooded, inflow into the sewerage system increases operating costs and causes overflows. From this perspective, the District has reviewed the draft environmental impact statement for the Estabrook Dam Rehabilitation and Operation (dEIS).

The dEIS is limited to three approaches to operating a repaired dam: (1) gates closed, (2) full winter drawdown, and (3) partial winter drawdown. The dEIS fails to provide sufficient information to compare flood risks among the different options. The dEIS should identify the number of structures in the 100-year floodplain and the typical depth of flooding for structures in both Glendale and Milwaukee. To allow a complete understanding of how the dam affects flooding, the dEIS should show flood elevations, number of affected structures, and depth of flooding for gates open, gates closed, and dam removed.

Generally, I am disappointed by the narrow scope of the dEIS. This project has much public interest and deserves a thorough analysis. The District's Commission adopted a resolution in May 2015 (enclosed) supporting removal of the dam because removal would support the District's efforts to reduce flood risks, while also improving habitat, water quality, and sediment quality. Furthermore, removal would have no continuing operation and maintenance costs. The public would benefit from a detailed analysis of the complete range of options; therefore, please consider extending the scope of the dEIS to include additional options, including removal.

If you have questions, please contact Tom Chapman from my staff at tchapman@mmsd.com or 414.225.2154. Thanks for your attention to these comments.

Sincerely,

Kevin L. Shafer, P.E.
Executive Director
Milwaukee Metropolitan Sewerage District

Encl.: MMSD Commission Resolution – Support for Removal of the Estabrook Dam (May 18, 2015)

Milwaukee Metropolitan Sewerage District

Certified Copy

260 West Seeboth Street
Milwaukee, WI 53204

Resolution: 15-053-5

File Number: 15-053-5

Commission Support for Removal of the Estabrook Dam

WHEREAS, removal of the Estabrook Dam will reduce flood elevations in the Milwaukee River upstream of the Estabrook Dam; and

WHEREAS, a reduction of flood elevations supports the District's goal of removing structures from the 100-year (1% probability event) floodplain; and

WHEREAS, removal of the Estabrook Dam will improve water quality, habitat, fish passage, and river aesthetics and reduce sediment accumulation.

NOW, THEREFORE, BE IT RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the Commission supports the removal of the Estabrook Dam as soon as practicable.

I, Anna Kettlewell, Commission Secretary of the Milwaukee Metropolitan Sewerage District, do hereby certify that the above is a true and correct copy of Resolution No. 15-053-5, adopted by the Milwaukee Metropolitan Sewerage Commission at a meeting held on 5/18/2015.

Anna Kettlewell

Anna Kettlewell, Commission Secretary

5-18-15

Date Certified

2200 N 64 St
Wauwatosa, Wi 53213
March 22, 2016

Kristina Betzoid
Wisconsin Department of Natural Resources
2300 N. Dr Martin Luther King Dr.
Milwaukee, Wisconsin 53212

Dear Ms Betzoid:

I am unable to attend the Public Hearing scheduled for March 22, 2016 regarding the Estabrook Dam repair, but I would like to express my view about the future of the Dam.

I understand that the Dam was built in 1930 which makes it over 80 years old. Since it has not been properly maintained over the past years it will probably require a great deal of repair, possibly beyond the present estimate of $6 million in the next 20 years. By that time it will be over 100 years old. I question whether this is good use of my tax dollars.

To remove the Dam will cost about $1.7million and eliminate the cost of operation of the gates and maintenance. I am interested in this issue because tax payers' assessments will be used. I would much prefer that my money be put into the parks and the repair of the Domes. I believe tax money should be used for projects which serve the whole community. This project serves a small number of residents who enjoy the boating and water activities in the artificial Lake created by the Dam. I can appreciate their desire to continue having this amenity, but feel strongly that the decision to use tax payer money does not respect the Common Good purpose of taxation.

Aside from the high cost of repair removing the Dam will return the river to it's original flow and will benefit fish and other aquatic life and leave us with a healthier River with less chance of flooding.

I also respect the expert opinions of The Milwaukee County Parks, Director of Emergency Management, and Engineers who have studied the issue and recommend removal.

Thank you for considering my opinion.

Sincerely
Erika M. Voss

2025 E. Greenwich Avenue, Apt. 2
Milwaukee, WI 53211
March 30, 2016

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

Dear Ms. Betzold:

RE: WDNR Must Consider Removing the Estabrook Dam

The WDNR needs to conduct a **COMPREHENSIVE** review of the environmental and socioeconomic impacts of **ALL** alternatives regarding the future of the Estabrook Dam; otherwise, the EIS would not be complete and comprehensive.

Due to the large amount of state and federal funds likely to be spent on Estabrook Dam, the WDNR cannot only consider Milwaukee County's preferred alternative of dam repair and associated operational scenarios when conducting an EIS. The Estabrook Dam currently degrades the health of the Milwaukee River, impedes fish movement, increases flood risk for homeowners who live upstream of the dam, and poses a risk to public safety and will continue to do so to an even greater extent if repaired. Milwaukee County has a failed history of properly maintaining and operating this dam, and the stakes get higher as the dam continues to age and degrade.

Without considering dam removal as a viable alternative, the WDNR is not doing its duty to protect our natural resources and to make informed management decisions that best protect the environment and the community.

Removing the Estabrook Dam would:

1. Improve water quality in the Milwaukee River and Milwaukee River Estuary,
2. Improve fish passage and increase recreational fishing opportunities,
3. Reduce flood and safety risk, and
4. Save Milwaukee County residents at least more than $4 million over the next 20 years.

Therefore, I urge the WDNR to recommend removing the Estabrook Dam located on the Milwaukee River in Glendale.

Thank you.

Sincerely,

Dianne Halligan

Dianne Halligan

Estabrook Dam Public hearing comments

Tuesday, March 22, 2016

Marcus Crawford

865-West Montclaire Ave

Glendale, Wisconsin

414-964-5040

crawford@etfwisdom.com

My name is Mark Crawford, our family lives at 865 West Montclaire Ave, Glendale Wisconsin.

Our family owns the largest track of land [one acre] on the Milwaukee River, and, as far as I know, we pay the highest property tax in Glendale for Milwaukee River residents. Our river land is sacred, as is the Milwaukee River; we have 60 different species or trees, an arboretum yard, hundreds of different birds, otters, beavers, bee hives, a pond, and a spring bubbling from the ground. Who here has a percolating spring?

We live on an ancient beach that in the 1800's was a Potawatomie Indian village thriving in times of Jesus Christ and the Roman Empire. We celebrate the Milwaukee River's birth every year; a birthdate preceding the melting of the last great glacier; a time 10,000 years ago; a time before texting and human narcissism. A time before today's dysfunctional democracy; a time before failed, visionless politicians. A time before rabble-rousing, loud-mouthed, small-minded, boot-licking pontoon boaters and water-skiers haphazardly stumbled upon Milwaukee River's glaciated shores.

The Glaciers were cold; but not as cold as today's political discussions. Glaciers speak the truth about Earth's temperature, Earth's fevers and distempers. Proponents of Estabrook Dam speak truthless and mindless Estabrook fictions. These mindless fictions are scattered about; like the millions of concrete fragments littering Glendale's River shorelines.

In Glendale, the Milwaukee River was channelized with concrete from "Streets of Old Milwaukee". Shoreline river concrete dumping was perpetrated secretly by commercial haulers. Like ants building hives, the haulers hauled until the Milwaukee River screamed "no more".

There were no cameras. The haulers drove away without remembrances or guilt, without moral conscience, civil duty or semblance of recordkeeping.

They drove away Sandhill Cranes, Great Blue Herons and Sturgeons. They drove away glaciated shorelines. They drove away beauty. They introduced the aesthetics of shoreline "ugly".

There is a historic link between Estabrook Dam and concrete channelizing the Milwaukee River in Glendale.

How do we know that Frankenstein, the monster with destructive force, won't eventually bankrupt and destroy Milwaukee County Parks Department? How many lawyers will dance on Milwaukee Park's pin head?

Now let's ask questions about motorboats and motoring. Who will promulgate rules and regulations? What political entity has justification? Why should we trust them? Who will enforce the enforcers? Will enforcement be secret or part of a Milwaukee County social media program? Will closed-circuit television surveillance cameras and security cameras be installed along the flooded river? When a Glendale pontoon boat collides with a Shorewood speed boat, should the Glendale Police and EMT Department be called, or the Shorewood Department? Will Sherriff Clarke show up wearing his hat, sporting a fishing pole? Who will pay for police emergency boats? Who will pay wages and pensions? Will police rescue boaters from air boats? What role will the DNR play? Have you ever spotted a DNR warden on the shores of the Milwaukee River? Will self-driving autonomous boats be allowed? Will boaters be allowed to launch drones from their pontoon boats? Who will collect the thousands of pounds of plastic, plastic bags, glass jars, and paper products tossed into the river by negligent boaters? Will Milwaukee County Citizens be allowed to live in house boats? Would boaters be allowed to use the flooded Milwaukee River has a race track? Would boaters have to register their boats annually? Should boaters annually pay user fees as reimbursement to Milwaukee County for its Estabrook Dam annual operating expenses? How would Milwaukee County Parks Department compensate rivers owners for breach of privacy and noise intrusion? Does the Milwaukee County Parks Department have legal and ethical responsibility to provide an equivalent U.S. Coast Guard service?

Secondly, the *intention* of Milwaukee County Parks and Milwaukee County is to construct a new fish passage and continuously monitor and operate this fish passage by manipulating Estabrook Dam gates like a carburetor manipulating gas flow in an internal combustion engine. Also, the ***intention*** of Milwaukee County Parks is to manipulate Estabrook Dam gates as a read and react response to ever changing water flows and weather conditions. The operation of an all-season Estabrook Dam amounts to a continuous juggling act of tossing risk balls in the air and eternally keeping the balls juggled. Even the most proficient and highest paid juggler drops the ball. Gravity and fatigue take a toll.

Should the Milwaukee County Parks Department invest in robots using artificial intelligence? Aren't robots and artificial intelligence fatigue proof? If not robots, then how many human operators are needed? How many Estabrook Dam operators will it take to screw in one LED bulb? Who pays their wages and pensions? What if it's raining upstream and the operator downstream reads and reacts to weather conditions too late or too early? What if the gate operators, like the command and control operators at the U.S. nuclear ballistic missile launching sites, operate Estabrook Dam under the influence of cocaine or opiates? What if the gates need to be quickly opened or closed and the electronics fail? What if the mechanical devices fail? What happens in an electrical blackout? What happens when the back-up generator doesn't work or doesn't start? Who manages this complex operating system? Will it be operated remotely? Is Milwaukee's Downtown prepared for a giant tsunami wave? Is Jones Island prepared for an upstream tsunami wave? When the Dam gates misfire, and the Milwaukee River floods north from Estabrook Dam to Kletzsch Park, ravaging property and homes, who writes the compensation checks? Does anybody in this far-flung Dam scheme go to jail? What if cyber-terrorist hacks the Dam software, opens the gates, flooding Downtown properties? Would Estabrook Dam be hardened and secured from criminal activity? How many surveillance cameras would it take to secure Estabrook? Why should we trust jugglers juggling?

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Stephanie Sandy

Address: 3332 S Pennsylvania Ave
Milwaukee WI 53207

Phone: 414-483-5820

E-mail: ssandy@wi.rr.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Remove the dam.
It makes environmental sense, it makes economic sense.
The majority of Milwaukee taxpayers support removal.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: James Stratte

Address: 6300 N. Santa Monica Blvd
Whitefish Bay, WI 53217

Phone: (414) 963-1215

E-mail: jim@boxelderinc.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Over the past two to three years, I have kayaked the Milwaukee River from Glendale (through the dam) all the way to Wisconsin Avenue. The river is beautiful — without the dam. Lincoln Park is beautiful enough with the river. We don't need a lake. We especially don't need a lake that becomes a hot spot for toxic chemicals, as it has been in the past.

In the future Fresh Water Capital that Milwaukee wants to be, we really should make the right decision for the environment and for water quality and that is:

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Remove the dam!

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Lexie Abrahamsen

Address: 8202 N Regent Rd
Fox Point, WI 53217

Phone: (414) 534-0462

E-mail: lexie.abrahamsen@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov* *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I attend Nicolet High School and am an advocate for the removal of the Estabrook Dam. Science classes at my school use the river as a resource to teach students about ecology and environmental science. The educational possibilities could be immensely expanded with the complete restoration of the Milwaukee River. Students could watch the return of native species over the years and learn about the healing capabilities of nature.

Additional sheets are included: ____ Yes __X__ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: STEVEN BRENGOSZ

Address: 6867 N. 91 ST

MILWAUKEE, WI 53224

Phone: 414 353-9026

E-mail: restart414@earthlink.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I SUPPORT REMOVAL OF THE ESTABROOK DAM. I FEEL THE ENVIRONMENTAL BENEFITS TO THE RIVER AND POPULATION AS WELL AS FLORA & FAUNA. I FEEL RECREATIONAL USES WILL BE MORE VARIED & ENHANCED I ALSO DOUBT THAT PROPERTY VALUES WILL BE AFFECTED BY THE LOSS OF THE "LAKE". PROPERTIES WILL STILL BE ON WATER I SUSPECT DATA FROM OTHER LOCAL DAM REMOVALS WILL SHOW NO VALUE DROP. I HAVE OVER THE YEARS SEEN VERY LITTLE TO ANY BOAT TRAFFIC ON THIS SECTION OF RIVER TO JUSTIFY THE DAM REPLACEMENT. IT IS ALSO WELL KNOWN THAT MKE COUNTY HAS HISTORICALLY HAD PROBLEMS FUNDING PARKS. I FEEL THEY WILL NOT HAVE THE FUNDS TO PROPERLY OPERATE & MAINTAIN THE DAM.

(OVER)

Additional sheets are included: ____ Yes ____ No

(OVER)

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Barbara Jakopac
3124 S. 40th Street,
Milwaukee, WI 53215
(414) 384-4487

* I am shocked that I read the repairs are going forward. Why are we having this listening session if the decision has already been made??

*Going ahead with repair is a reckless use of taxpayer $$

I don't support rebuilding the dam.

A Few Key Reasons for Dam Removal:

- For safety reasons. Dams are under the constant pressures of water and time and gradually deteriorate. As a result, many of Wisconsin's dams have not been properly maintained and are now public safety hazards. The DNR is responsible for dam inspections, enforcing compliance with safety standards, and for issuing repair and removal orders.
- To save money. In Wisconsin, repairing a dam typically costs 3 to 5 times more than the cost of removal. The on-going costs of maintenance, repairs, operation, liability, and dredging the impoundment further increases the true cost of a dam.

To restore recreational and natural values. Dams severely fragment river ecosystems, degrade water quality and devastate fisheries. In fact, the DNR has identified dams as one of the biggest threats to Wisconsin's aquatic biodiversity. Dam removal re-creates recreational and aesthetic opportunities — from canoeing and kayaking to fishing and wildlife watching. Restoring the land flooded by dams can also create great parks and wildlife habitats.

Feb. 15, 2016

Dear Supervisor Lipscomb,

I write you as a constituent of Milwaukee County to urge you to stop any proceedings to repair of the Easterbrook Dam and just tear it down. This Dam will require not only substantial taxpayer dollars to repair, but continual taxpayer dollars to maintain it. In my view and the view of numerous environmental and individual taxpayers this is a waste of our hard earned tax dollars given the now more immediate concern and need to repair to the Milwaukee county Domes. The Domes provide a greater recreational, aesthetic, educational and agricultural benefits, not only for our citizens, but the thousands of visitors nationally and internationally who visit our great city. The dam benefits a tiny few. It has been an eye sore and serves no purpose than to provide a very few citizens with access to the river. These are stringent times where tax dollars are needed to be spent for the good of the whole rather than the few.

From an environmental standpoint the river needs to continue it's natural flow. The removal of the North Avenue dam years ago substantiates the reality that a river is healthier and the water quality substantially better when a river is in a natural flow. Not only is the water quality better, but the aquatic life forms can flourish and pursue their natural course. You can see a healthier and cleaner river since that dam was

removed. You can also observe a river that has had tremendous increase in recreational activities for all citizens as a result.

Salmon fishing is a tremendous economic contributor to Milwaukee and the Great Lakes. Yet this dam hinders and may even prevent this species from proliferating. This has a dire effect on an industry which produces thousands of dollars for the Milwaukee economy. The fish must and should have access to the upper levels of the river to provide adequate spawning environment. You know this to be true as experts have given testimony to that fact. I have fished the river in the spring and fall during the salmon runs. I have fished just below the dam and could have walked across the river an the backs of dead and dying fish. A fish ladder, which has been suggested, will not accommodate the numbers. Another point, opening up the river will provide greater fishing opportunities for anglers up river. Again as a positive economic and recreational resource.

I urge you not to be short sighted. Take down the Easterbrook Dam and allow the Milwaukee River to run free.

You immediate attention to this matter is requested.

Yours truly,

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Paula Anderson

Address: 4685 N. Wilshire Rd
WFB, WI 53211

Phone: 414-964-7047

E-mail: andersonpaula01@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I believe the dam should be removed as proposed by all agencies committed to river revitalization and the quality of Lake Michigan.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

State? Rock ramps – alts – Lincoln Park Friends

From:

Name: Scott [illegible]

Address: + Address

Remove dam – I've seen it work

Phone:

Spray, colored lights

E-mail:

1986 – Mayor Meier $1M on dam repair

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:
  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212
- Comments must be received by April 6, 2016

Comments on the DEIS:

0. Milw River belongs to all of us who live up or down stream.

1. Lived by Milw R. North Ave. for ~~30~~ 25 yrs.

2. Adv of draw dam became clear a few years after 1989 – a stagnant fish-filled pool held back by a decaying & expensive dam was replaced by a clear-flowing river – This change was opposed by many, incl. Some incl. Sherwood. 25 yrs later – a once-controversial change has become the right thing to do. I hope some common-sense environmentalism will flow upstream to Glendale & that the dam will eventually be demolished to return this river to its natural state.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Martha Spencer

Address: 6116 N. Sunny Point Rd.
Glendale, WI

Phone: 414.870.3104

E-mail: marthaspencer@sbcglobal.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

The research shows that 300 Glendale property owners currently in the flood plain will benefit by removal of the dam. We may even have our properties removed from the flood plain. Given Milwaukee County's inability to ~~&~~ maintain other assets such as the Domes, ~~there~~ should be adequate funds to not only build the dam but ~~make~~ take emergency management action needed during flooding events to prevent flooding to properties like mine or to maintain the dam for the next 50 years. ~~Lacking~~ I support dam removal.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Demaris Kenwood

Address: 5720 N. Bay Ridge Ave
Whitefish Bay, WI 53217

Phone: 414 967 5966

E-mail: pandimai@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please remove the dam for the following reasons:

- it would impore the health and flow of the Milwaukee River for residents, fish and wildlife.
- removal would cost less than repair and maintenance
- removal would reduce risk of flooding for residents
- ~~ham~~ the dam serves no public purpose so county funds should not be used for private home owner purposes.

Thank you.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Joyce Bell

Address: 1524 N. 51st St

Milwaukee, WI 53208

Phone: 414-453-0868

E-mail: joycebell@inbox.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please do not repair the Estabrook Dam, and remove the dam. Use the money to repair the Domes instead.

Thanks.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Margaret McGuire

Address: 2530 N. 96th St.
Wauwatosa 53226

Phone: 414-453-0953

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Please take it down! Be fiscally responsible.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: CHRISTOPHER M. VERNON

Address: 4111 N. PROSPECT AVENUE

SHOREWOOD, WI 53211

Phone: 414-331-2444

E-mail: Kitvernon@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

~~PLEASE~~ THE COUNTY BOARD SHOULD REVERSE ITS DECISION TO REBUILD THE DAM. IT IS A VERY EXPENSIVE BOONDOGGLE THAT:

1) WASTES MILLIONS OF SCARCE TAX DOLLARS
2) FLIES IN THE FACE OF SCIENTIFIC EVIDENCE AND OF PUBLIC OPINION.
3) FAVORS THE INTEREST OF A VERY FEW PEOPLE AND FORCES THE REST OF US TO PAY FOR SOMETHING WE ~~DON~~ FEEL IS WORTHLESS
4) THERE ARE MANY MORE WORTHWHILE PROJECTS WHERE THE MONEY ~~COULD~~ SHOULD BE SPENT!

Additional sheets are included: ____ Yes ___X___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 22, 2016

Greetings,

My name is Harold Schmidt and I am the chairperson for The Friends of Estabrook Park (FOE). Our group functions under the auspices of The Park People and is dedicated to the protection and preservation of Estabrook Park. Several years ago, FOE took a position opposed to reconstruction of the Estabrook Dam. This past year that position was reaffirmed. We believe that removal of the dam will be good for Estabrook Park, good for the health of the river, and better for the taxpayers of Milwaukee County.

The Friends of Estabrook Park urge the Wisconsin DNR and the Milwaukee County Parks to table the proposal to repair the dam in favor of deconstructing it. Please take out the dam.

Sincerely,

Harold Schmidt

Chair, Friends of Estabrook Park

414-759-4786

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Margot Fuchs

Address: 6501 N. Greenbay

Glendale, WI 53209

Phone: 414-352-0531

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

1st the pond is ugly
& drive over the river on Bender 3-5X a week
& enjoy seeing the free flowing sparkling
river.

2nd keeping the dam is expensive & will be
with upkeep. There are greater needs for the county
the domes - roads - parks.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Melinda Vernon

Address: 4111 N. Prospect Ave.

Shorewood, WI 53211

Phone: 414-627-2444

E-mail: melindajvernon@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

PLEASE ask the County Board to reconsider their decision to rebuild the dam. It needs to be torn down. The financial facts alone are compelling. However to disregard the will of the scientific community and the vast majority of the public in favor of a handful of affected property owners is irresponsible and just plain wrong. Please ask the County Board to do the right thing and vote in favor of our natural environment. Thank you.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: John Jansen

Address: 7819 N. Rockledge Ave.
Glendale, WI 53209

Phone: _____

E-mail: _____

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

County Supervisor Theo Lipscomb told me personally about 5 years ago that he is emotionally attached to the Estabrook Dam because his father or grandfather was once in charge of the dam's operation. What a poor reason to support the maintenance of a financial boondoggle that can, at most, benefit a few dozen residents. I have canoed directly upstream from this dam for 30 years and I can say unequivocally that the river level now (with the dam gates open) is canoeable all summer long. Please do not let a few hundred vocal residents who have been led astray by Sup. Lipscomb prevent you from removing this dam.

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

J Jansen

March 21, 2016

WI DNR

Kristina Bedsold

2300 North Martin Luther King Drive

Milwaukee, WI 53212

Dear Ms. Bedsold:

I'm writing this letter to show my support for repairing the Estabrook Dam along with supporting a partial winter draw-down.

Reasons being:

- Construction and repair costs have been completely distorted.
- The Urban Ecology Center usage for children's activities has been discontinued.
- Milwaukee River clean-up investment was between 30-50 million dollars so people could enjoy this recreational (impoundment) area. The Blatz Pavillion was once a popular swimming hole on the Milwaukee River.
- Removal of the Dam proposes a serious risk to flooding. The Army Corps of Engineering rebuilt the dam for this prevention some eighty (80) years ago.
- Present low water levels create warmer water affecting loss of wild life.
- Why are maintenance costs for operating the Dam so high if the gates are manual?

Thank you,

Thomas J Ramstack

Ms. Kristina Betzold
Department of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, WI 53212

725 W. Fairfield Ct.
Glendale, Wis. 53217
March 26, 2016

Subject: Estabrook Dam

Dear Ms. Betzold:

I have been a Milwaukee County resident since 1956. I am not a riparian owner. However, my family enjoyed skating in front of the Blatz pavilion years ago and many years of canoeing in Lincoln Park made possible by the Estabrook Dam.

The Estabrook Dam was built to return the water level in Lincoln Park to its natural level at the time the park was created in 1907. This was necessary as the river channel was straightened and lowered by blasting out the bedrock river bottom as a Civilian Conservation Corp Project.

Improvements along the river have been made in recognition of the historic water level maintained for over 100 years. Maintaining the water level contributes to the ambiance of Lincoln Park and enables additional recreation opportunities in an urban area.

Many dams are maintained to provide recreational opportunities. Repairing the dam is necessary for Lincoln Park to again provide greater water activities for county citizens.

I encourage issuance of necessary permits so work can start as quickly as possible.

Sincerely,

John G. Mulhern

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave

Glendale, Wisconsin 53217

Phone: 262 751 2215

E-mail:

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

False, ~~an~~ Exaggerated and Expensive Advertising to satisfy a few weed lovers, bug lovers, mosquito (nile) infested parks is so shameful, unhealthy to our city, Lincoln Park, the businesses and average and below income levels ~~along of media~~ of residence who live along the river. Not wanting to exclude others outside the 53217 area. Everyone uses this river. Everyone from all walks of life uses and enjoy the river. It exposes, educates and provides recreational use immensely. The public will be handed a disservice if dam is taken down. A reminder False, expensive Advertising is doing the public cont. →

Additional sheets are included: X Yes ___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave
Glendale, WI, 53217

Phone: (262) 751 2215

E-mail:

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

harm by misguiding the public and using public position) to advertise a political view. Just do the right thing for everyone When the City of Milw. and its Counties voted for the Stadium. I supported it. (I personally have never used it) The Surrounding properties profited. Shall I start balking that they all are millionaires? Just like the claim they made about homes and businesses in Glendale along the Milw River being all millionaires. I thought with good reason the stadium would be good for Milw. and all citizens alike. Ignore the "Riverkeepers, nothing but a thorn and a cost to all.

Additional sheets are included: ____ Yes ____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: DAVE DORNER

Address: 849 W. MONTCLAIRE AVE
GLENDALE, WI 53217

Phone: 414 964 3215

E-mail: DDORNER@AOL.COM

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I'VE HAD THE OPPORTUNITY TO PREVIEW THE FISH PASSAGE DESIGN AND HAVE COMPARED THE USGS FLOW DATA UPSTREAM OF THE DAM WITH OPEN CHANNEL FLOW OVER WEIR CHARTS AND I SAY THAT THE DESIGN IS VERY GOOD

Additional sheets are included: ____ Yes X No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 22, 2016

I want to submit my support for the repair of the Estabrook Dam with winter drawdown.

I am an environmentalist. I've been a member of the Sierra Club since 1978, and have held many positions in that organization including State Chairman of the Illinois Chapter for several years. I am also a member of Milwaukee River Keepers. I have read everything I can find supporting the repair and the demolition of the dam. There is science that supports keeping the dam that deserves as much consideration as the science the supports the removal of the dam but I will leave that to those with more credentials.

What I want to address is my personal observation of what we have lost in the past five years and what we can have again. I moved to Glendale in 2005. I am one of the "well to do residents" (according to one very arrogant politician) who lives on the river. During the first two years we lived here we saw many, many canoeists going past our house. There were groups of kids from the city every weekend who were learning to appreciate nature and enjoy the outdoors in a very healthy way. The year the dam was left open, all that stopped. For the past five years we have seen a handful of canoeist the whole summer. We used to canoe ourselves but the only water our canoes saw last year was from the rain that fell. The water is either too low making canoeing impossible without damaging the bottom of the canoe or it's in flood stage with trees, branches and debris floating down making it extremely dangerous.

The river is a unique recreation opportunity that Milwaukee County has to offer it's residents. The price tag for repairing the dam and installing gates for drawdown are so insignificant compared to the stadium that is being built that serves only those wealthy enough to afford the high priced ticket and parking to attend an event. The river is there for all to enjoy for free for fishing, canoeing, boating, swimming and even water skiing. Lincoln Park Lake is a treasure that makes Milwaukee County a great place to live. A billion dollar stadium cannot replace that, only proper dam repair can fix what the past County Superintendents have neglected and allowed to fall into such disrepair that we have come to this point.

Evan Emmons
1011 W. Montclaire Ave
Glendale, WI

Eemmons414@aol.com

I AM GLAD TO HEAR THE DECISION FINALLY HAS BEEN MADE TO REPAIR THE ESTABROOK DAM.

I have lived on Eula Court, in Glendale since 1989. My daughter grew up enjoying summer fun on Before the late 1980s, I lived on Island Drive in Mequon, where we also ~~the~~ enjoyed the Milwaukee River. Island Drive consisted of six houses and Milw. we were surrounded by the river. We had a canoe, kayaks and River. snowmobiles that we bought for fun on the river. We even had a neighbor with a ~~small~~ SEA plane that would land on the river. When we moved to Glendale so our daughter could attend Nicolet, we bought another house near the river for the beauty and fun on the water.

Not so long ago, If you looked along the shoreline, you would see boat houses with boats in them, pontoon boats, canoes, kayaks, a big water trampoline and skidoos. **But not anymore**. One couple, Chip and Laura Gall, would eat dinner on their pontoon boat with their 4 kids whenever possible in the summer. They had to sell the pontoon boat for next to nothing because they couldn't use it anymore nor could they get it out of the water. That was an interesting "extraction" when the buyer came to pick up the boat with some construction equipment in tow.

Our little residential area near Lincoln Park gets overlooked and often the short end of the stick. For instance there's that big GREEN sound barrier along I-43 just south of Hampton. ~~Was that the only color of paint they had left when it was time to paint the wall?~~ Other areas of the freeway have very tasteful, natural color walls, but not in our area!

By Sprecher Brewery, there's that I-43 bridge over Glendale Avenue. Walking along Glendale Avenue, you see there are no lights like other bridges, losts of broken glass, weeds, rocks. It's totally unkempt. Thank you very much.

All last summer we watched the construction on the other side of the river. Trucks, dust. They even worked weekends, when we just wanted to kick-back and enjoy the peaceful river view!

And now the dam – this has greatly affected the lifestyle of my family and my neighbors on the river. This *long-drawn out decision* of whether or not to repair the dam and all the controversy is wearing on us.

~~Obviously~~ there aren't many constituents in this area along the river who truly care about repairing the dam and a partial winter drawdown, ~~and this dam project seems to be an easy target to save money to spend on other projects with higher visibility.~~ I am here to urge County Executive, Chris Abele and the DNR to repair the Estabrook Dam ~~and~~ restore the summer fun to our riverside neighbors.

AS CTY EXEC IS OFTEN ASSISTED

I'M CURIOUS TO KNOW HOW THEY WILL MAINTAIN THE WATER LEVEL. IF WE STILL CANNOT BOAT ON THE RIVER, WHO DO WE CALL?

and continue the partial winter drawdown OF THE RIVER. ONLY THIS WILL

DO WE START THIS PROCESS ALL OVER AGAIN.

Respectfully Submitted –

Susan Kipp
819 W. Eula Court
Glendale 53209

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Deb Walser

Address: 802 W. Rock Place
Glendale, WI 53209

Phone: 414-961-0787

E-mail: deb.walser@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Get the dam repaired Quickly.
The Board approved repair of the dam. Why are there so many delays? Repair the dam and move on to other issues. For 16 years we have paid higher taxes for having property on the river. We should be able to use the river recreationally! We cannot in its current condition - the Algae at Summer is terrible! Fix the dam. Restore the Water levels. And explain to me in an email Why this is taking so long!!!

Additional sheets are included: ✓ Yes ___ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

thank You.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: CHARLES Richard

Address: 1141 W. MONTCLAIRE AV

GLENDALE WI 53217

Phone: 414-721-8817

E-mail: CHAS5152@ATT.NET

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

It is a shame on what a handful of people are doing to push on destoring the dam, making false statements and data. The worst part of their campaing is making this debate political for county elections.

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

(COPY)

March 29, 2016

Kristina Betzold
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee, WI 53212

Dear Ms. Betzold,

On March 22nd last, my husband and I attended yet another hearing regarding the Estabrook Dam, and we listened carefully to the various speakers presenting "reasons" for and against the dam.

It is difficult to understand why one single concept has been so completely neglected and ignored by both of the seemingly intelligent sides in this controversy.

Now that the North Avenue Dam is long gone, the Estabrook Dam is the last remaining place where the natural debris and man-made contaminates may be trapped and removed most economically from the river from time to time. It should be obvious that this approach is far less costly than trying to fish out the styrofoam cup or massive tree trunk one piece at-a-time down in the harbor or lake. It should be obvious that it will be far less expensive to dredge the sediment that will settle to the bottom in the "lake" immediately behind the dam, as opposed to downstream in the harbor and Lake Michigan. This is what rivers do – they move huge amounts of material downstream. We understand that in the relatively recent past it cost approximately $22,000,000.00 to dredge and clean up just a few blocks of the Kinnickinnic River, which is a much smaller watershed.

The Milwaukee River is quite young, geologically speaking. In less than ten thousand years, it has scoured a huge, Grand Canyon-like gorge from near the dam to the downtown area and Lake Michigan. All of that sediment that was previously in that Gorge has been eroded and moved downstream. If not dredged out of the lower river and harbor, the sediment will eventually silt up. The silting will continue out into Lake Michigan, the source of our drinking water. We should be grateful for our dam, which allowed sediments and contaminates to settle and be recently removed before reaching Lake Michigan.

The bedrock that was removed in the 1930's had previously created the so-called "Lake" upstream of the Estabrook Dam, at the same elevation as the dam does now when the gates are closed. That effectively stemmed the ongoing eroding of river banks and bottom from progressing farther upstream. We no longer have that protective bedrock, but we do have the stopping capacity of our Estabrook Dam. If it is now removed, we lose our ability to trap and remove future sediment, debris and

contaminates. In addition to the sedimentation and contamination, it is only a matter of time before an unsuspecting boater crashes into a three foot-in-diameter tree trunk down in the harbor inside the breakwater. That tree trunk would likely have originated upstream of the Estabrook Dam and could have been caught and removed.

No one has correctly anticipated all of the huge, ongoing costs and consequences of dam removal. Apparently no one is able to see this whole picture clearly except a very few of us.

I hope to have shed some light on this subject that previously has not been considered. I hope that you and the DNR will now support efforts to preserve the Estabrook Dam with an adjustable as necessary water level. Please allow us to repair!

Sincerely,

Diane Kuesel

Diane L. Kuesel

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Henner

Address: 1005 W. Montclaire

Glendale, Wis, 53217

Phone: 262 · 751 · 2215

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: *DNREstabrook@wi.gov or,*
- Add additional pages of information and send in a stamped envelope to:
  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212
- Comments must be received by April 6, 2016

Comments on the DEIS:

I voted in support of Milw Stadium
I'm a voter remember that
You have allocated funds

Additional sheets are included: _____ Yes _____ No

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Mary Hanner

Address: 1005 W. Montclaire Ave

Glendale, Wisc, 53217

Phone: 262 751 2215

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

If you build it they will come!

6

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Ken Dondero

Address: 1035 W. Mont Claire Ave
Glendale, Wisc, 53217

Phone: (414) 962-8247

E-mail: NA

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

If you build it
they will come!!

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Comment regarding the Draft Environmental Impact Statement dated approximately March, 2016 for the proposed repair of the Estabrook Dam in Milwaukee County.

I am in favor of repairing the dam.

With respect to the alternatives presented for an operational order I am generally in favor of Alternative #2- Partial Winter Drawdown Operation. However, no valid reason has been offered by previous draft EAs and the EIR as to the timing of the drawdown. The dEIS notes potential impacts on spawning runs and mussels associated with the proposed timing of Alternative #2. I suggest that any such impacts could be mitigated with a more reasonable timing of the drawdown. Since I live on the river a short distance upstream of the dam I have firsthand experience as to conditions on the river. I see no valid reason to draw down the impoundment as early as September 15. It is unreasonable to believe that such an early date is necessary to mitigate ice problems. More reasonable dates would be November 1 November 15, or possibly even December 1. The same concept applies to the seasonal end of the proposed drawdown. The drawdown could easily be ended by April 15 and still have the same effectiveness at mitigating ice issues.

Better still would be to allow flexibility in the timing and exact manner of the drawdown. I am not familiar with the exact timing of the various fish runs. It seems to me that they are not determined by a specific date on the calendar. Therefore it would seem most beneficial to begin the drawdown after the last run in the fall if at all possible. The same idea would also apply in spring. If there are known fish runs in early spring, then it seems that the end of the drawdown should begin before such time if possible. If not possible to time the drawdown season to fully accommodate fish runs, it would seem that past practice of opening one or 2 of the gates partially to facilitate such runs could be easily achieved and allowed and provided for as a part of the operational order.

When the dam was originally built, there had been a recent history of large flooding events occurring in March that were associated with the buildup of ice on the river in conjunction with rain events and the beginning of thawing of such ice. It seems readily apparent that a study of such events could easily be done with the goal of achieving a better proposed date for ending the drawdown than the seemingly arbitrary date proposed. I believe the conclusion of such a study would be that significant flooding events exacerbated by ice have generally not happened beyond April 1 and likely have never happened beyond April 15. Now there is recent history of 5 and 10 year flooding events occurring in April. These recent events have not been associated with significant ice buildup factors, to my knowledge. So it could be that ending of the drawdown in April would also then cause the need to open the gates for rain events in April. Again, a competent and objective study of such events would surely lead to a logical conclusion that would call for ending the drawdown significantly earlier than May 15 and perhaps as early as April 1.

Better still would be to allow the beginning and end of the drawdown to be determined on a seasonal basis, within established time windows, but based on actual current weather factors and other actual current circumstances such as fish runs.

not "normal" conditions. Therefore it was and is perfectly within reason and lawful under the permit to open some or all of the gates when there is flood potential and for purpose of preventing ice damming. There are also records suggesting that the seasonal drawdown has been occurring since at least 1969. Historic records and photographs demonstrate that full pond conditions during winter months led to severe ice dam problems. These problems required emergency action including dynamite blasting of ice dams. The operational protocol proposed by MRPA recommended a partial winter drawdown that begins later in the year than recent practice. This protocol would alleviate spring thaw and ice dam flooding concerns while minimizing adverse biological effects of seasonal drawdown. This protocol will also have biological benefits over continuous full pool operation. I have made suggestions recommending a similar protocol above.

Furthermore, contrary to the vague statement regarding correspondence of 1986 being the first such correspondence, I am attaching correspondence from 1983 acknowledging the seasonal drawdown. (42)

The statement that the "river morphology never included a widening or 'natural-lake-like' feature" is not supported by the facts and should be removed.

The area upstream of the present dam did consist of a lake –like area previous to excavation of the river bed which was begun in 1933. True, the central channel through Lincoln Park did not exist, however a lake-like condition of deeper and slower moving water did exist due to the existence of a substantial rock ledge in the river channel in the vicinity of Port Washington Road. The documents provided in Attachment 2 of the EIR clearly state that the removal of the rock ledge was begun in 1933. Another document states that the removal was 50% complete by August, 1935. The 1937 aerial photograph provided which purports to prove that a lake –like condition did not exist was taken after the vast majority of the natural rock dam that previously existed and created the lake–like condition had been removed. The letter dated 9-1-39 that is included in Attachment 2 of the EIR clearly states that the dam was built to maintain a water level equal to the level that existed prior to removal of the rock ledge, as does the document included in Attachment 2 titled "Estabrook Park Dam". Both of these documents refer to the pre-existing portion of river as a "body of still water." MRPA has provided numerous further documents proving the existence of a lake-like condition and that the purpose of the dam is to maintain the natural historic water level. (1-4,6)Yet, none of these documents were ~~been~~ included in the EIR. The 1940 Wisconsin Planning Board Bulleting referred to in this section clearly states that the capacity of the channel must never be reduced, yet this entire document* is clearly biased in favor of dam removal- which would substantially reduce the capacity of the channel.

*the EIR

There are problems with the hydraulic analyses conducted by SEWRPC. All of the 100 yr elevations portrayed in the SEWRPC analysis were higher than those portrayed in a similar study of the area performed by FEMA and completed in 2008. SEWRPC was asked for an explanation of this difference and their answer was essentially that the lake infill that has occurred since then due

*"This entire document" referred originally to draft EA of 2014-2015. For purposes of this comment, it applies to the EIR but not to the dEIS.
-Pk

According to Memorandum Report 172, a 1 % probability flood at the Estabrook Gauge has a flow of 14,800 CFS. According to USGS,NWS and FEMA data, on June 21, 1997 this gauge read 10 feet and the flow was 16,500 CFS. This flood is also documented in Memorandum Reprort 172. By adding 10 feet to the gauge height, this would indicate that this larger than a 100 yr flood had an elevation of 617.23, NGVD29.

Memorandum Report 172 states that the elevation for a 1 % flood at mile 6.829, just above Estabrook Dam, is 620.46. The analysis for the EA states that the elevation for a 1 % flood at the same point with a repaired dam is 620.68. Both studies state that the elevation for a 1% flood at mile 6.827, just below Estabrook Dam is 619.23. I am not sure of the exact location of the gauge, but according to USGS it is about 1200 feet downstream of the dam. This would put it at approvimately mile 6.60. The EA analysis does not include elevations for anything downstream of 6.827, but the Memorandum Report 172 does. The 1 % elevation at mile 6.61 is 618.45 and at 6.567 it is 617.63.

So, how is it that your 1 % flood elevations are approximately one foot higher than the actual measured elevation of a flood that was larger than a 1 % flood? "

A. "We have field checked the location of USGS gage 04087000 and confirmed that the gage house and the published coordinates are located between Milwaukee River model cross-sections RM 6.567 and RM 6.610 downstream from Estabrook dam. Based on the USGS 04087000 stage-discharge rating curve, a flow of 14,800 cfs (100-year flow) would result in a stage of approximately 616.7 feet above NGVD29. At the location of the coordinates of USGS 04087000, the 100-year stage of the FEMA FIS effective model and the model reflected in SEWRPC MR No. 172 would be about 618.0 feet above NGVD29. This difference is a reasonable correlation and calibration between modeled and measured data. In addition, this difference between the modeled and measured stage downstream of the dam would not be realized in the reaches of interest upstream of the dam due to the hydraulic effects of the dam structures."

It would seem readily apparent that a 1 foot discrepancy between actual and modeled conditions is of utmost significance, especially when the actual condition shows actual flood elevations to be significantly lower than those claimed by FEMA and accordingly, SEWRPC.

So, the SEWRPC analysis when viewed in light of the FEMA analysis shows that:

1. The entire model is flawed because it does not accurately predict actual events
2. Within the flawed model, the model shows that in-growth due to the prolonged drawdown has increased 100 yr flood elevations.

It would then follow that upon permanent dam removal, according to these models, further increase to the 100 yr elevations can be expected and that such elevations may eventually increase beyond the established limits. (16)

necessary, what proof is there that movement beyond the supposed barrier is necessary? There is no substantial evidence that impacts of the dam under any of the proposed operational alternatives would have such an impact on fish and mussels as to require removal of the dam.

Repectfully Submitted this 6th day of April, 2016, by

Brian Kreuziger
706 West Rock Place
Glendale, WI 53209

References

1. Ullius, F.W., Special Assistant Engineer, Civil Works Administration, City of Milwaukee. *Letter to Mr. D.S Teter, Project Engineer*, April 23, 1934.
2. Author unknown, possibly Milwaukee County Parks Department, Proposed Dam, Estabrook Park, Milwaukee County. Alternate title: Job 8. Form 7 No.122 Estabrook Park SP-5, Circa. April, 1937, Appears to be the final proposal submitted to the PSC as part of the dam permit approval process. Refers to CCC camp SP-5, which was the Estabrook Park camp and appears to have been accompanied by an April, 1937 approving document of an engineer that names several regional and state governmental authorities.
3. Johnstone, L.I., Assoc. Engineer, Field Technician's Comment, April 19, 1937.
4. Milwaukee County Park Commission, Estabrook Park Layout Plan for Milwaukee River Channel Deepening. December 6, 1933, approved January, 1934.
5. Public Service Commission of Wisconsin, In the matter of the application of Milwaukee County to construct, operate and maintain a damin the Milwaukee River near the City of Milwaukee, to be known as Estabrook Park Dam, for the purpose of flood control, maintaining normal water level under normal conditions,and to provide recreational facilities and to remove rock ledge in river bed above dam in aid of flood control and navigation., May 26, 1937
6. A. Glamm, F.C., Progress Report Bureau of Engineers Project 40-B14-106 Month of August, 1935, August, 1935. Accompanied by:
   B. Unknown Author, W.E.R.A. Proj. #40-B14-105 July 16,1935 Removing Rock-Milwaukee River, July 16, 1935

10. Warzyn, Will. Statement at Milwaukee County Parks, Energy and Environment Committee meeting. March 24, 2009.

11. Mussels of the Milwaukee River Greenway: A Preliminary Survey, Gary S. Casper, Great Lakes Ecological Services, LLC; and Jason M. Dare, Dare Ecosystem Management, LLC, March 6, 2013.

April 5, 2016
Herbert W. Oechler

Kristina Betzold
Wis. Dept. of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, Wis. 53212

Subject - Estabrook Dam, EIS statement

Dear Ms. Betzold,

This letter is a follow-up to the information DNR Hearing at the Glen Hills School a few weeks ago. I am a Board Member of the South East Wis. Chapter of Trout Unlimited which has a membership of about 1,900. Our Board and most of our members favor removal of the Dam for reasons enumerated as follows.

1. The best fish passage is a free flowing river without a costly "stair step" artificial structure.
2. A free flowing river will diminish accumulation of silt. A costly removal of toxic silt was recently undertaken in the Lincoln Park area above the Dam.
3. If given a chance and improving water quality free flowing rivers heal themselves.
4. Removal enhances flood control and reduces liability for the Dam owners. (Milwaukee Co.)
5. Water above the Dam is subject to excess warming in the Summer which increases algae blooms

6. Removal of the North Avenue Dam several years ago was a remarkable success.
7. Motorized boat traffic in the impoundment creates wave action which erodes the shoreline.
8. Repair is costly and maintenance over the life of the Dam is estimated at $150,000 – $160,000 per year.
9. In our high tax state and our high tax county the cost of repair is a major concern to Milwaukee Co. residents who do not live above the dam.
10. The major beneficiaries of repair are residents along the upstream impoundment which has poor access.
11. A free flowing Milwaukee River will provide canoeing, kayaking, fishing and nature watching for far more people than live along the upstream banks.
12. Removal could "free up" money to help our "cash strapped" Milwaukee Co. Parks System.

Thank you for your consideration and please forgive my penmanship.

Sincerely,

Herbert W Oechler

Herbert W Oechler
8220 Harwood Ave. # 138
Wauwatosa, Wi. 53213

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Sonya Baime

Address: 1100 West River Park Lane
Glendale WI 53209

Phone: 414 961 0229

E-mail: cert by sonya@wi.rr.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

March 29, 2016

Kristina Betzold
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee, WI 53212

Dear Ms. Betzold,

This letter concerns the Estabrook Dam controversy. I hope that you will actually read it as opposed to just tabulating "for or against".

Both sides have neglected or deliberately ignored a number of very important facts: The original purposes for the Dam and the downstream consequences of Dam removal.

The letter dated March 29, 2016, written by my wife Diane, (copy enclosed) attempts to clearly demonstrate the real and true downstream consequences and huge subsequent costs of dam removal. Those costs will be on-going forever and paid by all taxpayers regardless of where they live and reside. The future cost savings of Dam preservation will accrue to all taxpayers and especially those who use and drink Lake Michigan water.

The Dam, and its adjustable gates, was a remedial project built after the old "backwards S" course of the river through Lincoln Park was modified to improve flow and diminish ice jamming that had previously been an upstream annual flooding event. Additionally, the dam was built after the enormous Bedrock removal project of the CCC upstream in the 1930's. The removed natural bedrock had previously given us some benefits and some disadvantages. Before the Bedrock removal, the river was held to a level twelve months of the year that was at the same level as the Dam affords now with the ten gates closed. The bedrock was a natural dam that results in the so-called "lake". The advantage this gave us was a basin in which sedimentation from upstream could settle to the bottom and not be flushed downstream to Lake Michigan.

Additionally, the bedrock armor stopped the enlargement of the deep gorge in which the river flows from the Dam to Lake Michigan. With the bedrock removed, the river would have continued to erode and the gorge would have continued to march upstream farther and farther much like Niagara Falls is doing between Lakes Erie and Ontario.

The Estabrook Dam gives us the best of numerous worlds as the wise designers intended. With the gates closed part of the year, we have "natural", original upstream water levels which give us an outstanding recreational facility as well as the mentioned settling basin for sediment collection as necessary.

We should rejoice that we have had the Dam in place to "catch" the PCB's and other toxic material (as well as the tree trunks) before they pollute Lake Michigan and our drinking water supply.

We should rejoice that our Dam has prevented millions of cubic yards of natural sedimentation from reaching the Harbor and Lake Michigan where the costs of dredging and filtering are too huge to predict and measure.

We should rejoice that our Dam has prevented transmission of an untolled amount of man-made debris and natural floating wood from reaching the harbor for MMSD to worry about removing before a boating or other tragic occurrence.

Eric Reinelt, my colleague and the former Director of the Port of Milwaukee, was adamant about preserving the Estabrook Dam to prevent transmission of all material to the harbor and into the lake. He could not be present to voice this position at an early hearing held at the Milwaukee Transit Center. However, he did sent a subordinate to express that preservation posture regarding the dam.

All of the removal advocates cite very noble sounding reasons for dam removal which seems to be gaining in popularity amongst so-called conservationists and their various groups. However, the concepts and facts presented in this letter are either intentionally or unintentionally ignored and omitted from their propaganda.

The people who designed and built the Estabrook Dam and reconfiguration of Lincoln Park were not fools. They had the wisdom to know that not all dams are bad. They had the wisdom to implement a facility that would reduce the prior flooding problems upstream of a huge magnitude in 1924 and earlier years.

Please do not impede the repair of the Estabrook Dam! Give it and all of us a chance to benefit from and enjoy all of the positive advantages it was designed to give. If we maintain it, future generations will thank us! Your representatives have told us that the decision to repair or remove is a local Milwaukee County Board matter. We have previously complied and voted to repair. Please allow us to proceed!

Very Truly Yours,

Scott C. Kuesel

P.S. The Friends of Kletzsch Park recently passed a resolution endorsing repair of the Estabrook Dam and Kletzsch Part Waterfall.

Enclosure

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Tom Chapman

Address: 4525 N. Larkin St.
Shorewood WI 53211

Phone: 414 963 0616

E-mail: tomchapman3@gmail.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

The draft EIS is not robust enough to identify the environmental impacts of all alternatives. For instance, the only alternative that lowers flood stage is dam removal. Any alternative that raises flood stage will not only impact flooding of homes but will also add unintended flood water into the MMSD system through floor drains. Even small stage increases of 3-6 inches could send thousands of gallons of floodwater into the sewerage system. This impact is not addressed in the EIS. Dam removal improves water quality, improves habitat, eliminates sediment accumulation, least costly and has no annual operations and maintence costs. Please add all the environmental impacts into a more robust EIS.

Additional sheets are included: ____ Yes ✓ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: David Thomas

Address: 635 W. Montclaire

Phone: 414-344-1044

E-mail: david@thomewald.net

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

See attached written statement

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

Friends of Lincoln Park Statement on the Estabrook Dam.

While the Dam is most often associated with Estabrook Park, its greatest impact is in Lincoln Park just above the Dam. We've had an opportunity to experience Lincoln Park with its full-pond lake of over 100 acres. And in the last 6 years, we've experienced it with no dam in place.

Lincoln Park is a place much like Milwaukee, where rivers meet. It has over 4 miles of shoreline, numerous islands, wetlands and diverse wildlife that includes beavers, mink, otters, muskrats, herons, multiple varieties of turtles, hawks, owls and much more. We urge everyone to get into a canoe or kayak and explore what is very nearly an urban paddler's paradise.

The Friends of Lincoln Park includes in its vision statement that we "promote appreciation for our rivers and accessibility for safe and quiet water recreation".

After the construction of the Dam in 1937, channels in Lincoln Park were widened from a width of about 150 feet to what is now over 1200 feet at its widest, if you combine the width of the three channels that go through the park. This area made up the lake that residents knew and used for about 70 years. Let me just explain what happens to the river in Lincoln Park when the dam is open. There is a water level gage just below the dam that paddlers commonly use to determine paddling conditions. The river at the Estabrook gage in the summer averages around 2 feet and the river is 130 feet wide at the gage. In a channel that ranges from 1200 to 600 feet wide, that makes the average water depth in the Lincoln Park channel between 3 and 5 inches. This makes for a lot of getting out and pulling your boat across sand bars. Sometimes, when the gage drops to 1.6 feet or less, paddlers know that it's futile to even try to get through the park. While "Swimmable" waters may be decades away, you are never going to swim in waters that are 3-5 inches deep.

The board of directors of the Friends of Lincoln Park has discussed the impacts of various decisions and makes this statement:

We urge the community and Milwaukee County to consider our belief that with the dam removed, with no effort to remediate water levels in Lincoln Park, paddling for novice or learning paddlers (youth, in particular), is very difficult. It's for this reason that we have advocated for the community to consider Option 3a, the lower-level impoundment created by a natural looking rock-ramp. This option was outlined in the county's draft EIS but got lost in everyone's scramble to take sides. Folks, it does not have to be just "Dam or No Dam" There are alternatives that would satisfy some of the needs of both

DNR Draft Environmental Impact Statement (DEIS) Comment Sheet

Estabrook Dam, Milwaukee Co.

Please submit your comments on the DEIS by **Wednesday, April 6, 2016**

From:

Name: Barry Stuart

Address: 1755 N. Cambridge Ave. Apt 103
Milwaukee WI 53202-1824

Phone: (414) 224-6165 (W) (414) 736-8352 (M)

E-mail: bstuartemke@yahoo.com

PLEASE DEPOSIT COMMENT AT THE DEIS hearing *or,*

- Fold this sheet and mail stamped sheet to the printed address on the back *or,*
- Send email comments to: DNREstabrook@wi.gov *or,*
- Add additional pages of information and send in a stamped envelope to:

  Kristina Betzold
  DNR
  2300 N Dr. Martin Luther King Jr. Dr.
  Milwaukee, WI 53212

- Comments must be received by April 6, 2016

Comments on the DEIS:

I hear dam removal will reduce bluegill populations. Will that be due to increased predation by fish like salmon and steelhead or increased competition by yellow perch?

Additional sheets are included: _____ Yes _____ No

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

Kevin L. Shafer, P.E.
Executive Director

March 23, 2016

Kristina Betzhold
Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, WI 53212

Subject: Estabrook Dam Rehabilitation and Operation Draft Environmental Impact Statement

Dear Ms Betzhold:

One of the missions of the Milwaukee Metropolitan Sewerage District (District) is to reduce flood risks in its tributary communities. Flooding directly causes property damage, economic losses, and adverse health effects. In addition, when structures are flooded, inflow into the sewerage system increases operating costs and causes overflows. From this perspective, the District has reviewed the draft environmental impact statement for the Estabrook Dam Rehabilitation and Operation (dEIS).

The dEIS is limited to three approaches to operating a repaired dam: (1) gates closed, (2) full winter drawdown, and (3) partial winter drawdown. The dEIS fails to provide sufficient information to compare flood risks among the different options. The dEIS should identify the number of structures in the 100-year floodplain and the typical depth of flooding for structures in both Glendale and Milwaukee. To allow a complete understanding of how the dam affects flooding, the dEIS should show flood elevations, number of affected structures, and depth of flooding for gates open, gates closed, and dam removed.

Generally, I am disappointed by the narrow scope of the dEIS. This project has much public interest and deserves a thorough analysis. The District's Commission adopted a resolution in May 2015 (enclosed) supporting removal of the dam because removal would support the District's efforts to reduce flood risks, while also improving habitat, water quality, and sediment quality. Furthermore, removal would have no continuing operation and maintenance costs. The public would benefit from a detailed analysis of the complete range of options; therefore, please consider extending the scope of the dEIS to include additional options, including removal.

If you have questions, please contact Tom Chapman from my staff at tchapman@mmsd.com or 414.225.2154. Thanks for your attention to these comments.

Sincerely,

Kevin L. Shafer, P.E.
Executive Director
Milwaukee Metropolitan Sewerage District

Encl.: MMSD Commission Resolution – Support for Removal of the Estabrook Dam (May 18, 2015)

Milwaukee Metropolitan Sewerage District

Certified Copy

260 West Seeboth Street
Milwaukee, WI 53204

Resolution: 15-053-5

File Number: 15-053-5

Commission Support for Removal of the Estabrook Dam

WHEREAS, removal of the Estabrook Dam will reduce flood elevations in the Milwaukee River upstream of the Estabrook Dam; and

WHEREAS, a reduction of flood elevations supports the District's goal of removing structures from the 100-year (1% probability event) floodplain; and

WHEREAS, removal of the Estabrook Dam will improve water quality, habitat, fish passage, and river aesthetics and reduce sediment accumulation.

NOW, THEREFORE, BE IT RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the Commission supports the removal of the Estabrook Dam as soon as practicable.

I, Anna Kettlewell, Commission Secretary of the Milwaukee Metropolitan Sewerage District, do hereby certify that the above is a true and correct copy of Resolution No. 15-053-5, adopted by the Milwaukee Metropolitan Sewerage Commission at a meeting held on 5/18/2015.

Anna Kettlewell

Anna Kettlewell, Commission Secretary

5-18-15

Date Certified

Comment regarding the Draft Environmental Impact Statement dated approximately March, 2016 for the proposed repair of the Estabrook Dam in Milwaukee County.

I am in favor of repairing the dam.

With respect to the alternatives presented for an operational order I am generally in favor of Alternative #2- Partial Winter Drawdown Operation. However, no valid reason has been offered by previous draft EAs and the EIR as to the timing of the drawdown. The dEIS notes potential impacts on spawning runs and mussels associated with the proposed timing of Alternative #2. I suggest that any such impacts could be mitigated with a more reasonable timing of the drawdown. Since I live on the river a short distance upstream of the dam I have firsthand experience as to conditions on the river. I see no valid reason to draw down the impoundment as early as September 15. It is unreasonable to believe that such an early date is necessary to mitigate ice problems. More reasonable dates would be November 1 November 15, or possibly even December 1. The same concept applies to the seasonal end of the proposed drawdown. The drawdown could easily be ended by April 15 and still have the same effectiveness at mitigating ice issues.

Better still would be to allow flexibility in the timing and exact manner of the drawdown. I am not familiar with the exact timing of the various fish runs. It seems to me that they are not determined by a specific date on the calendar. Therefore it would seem most beneficial to begin the drawdown after the last run in the fall if at all possible. The same idea would also apply in spring. If there are known fish runs in early spring, then it seems that the end of the drawdown should begin before such time if possible. If not possible to time the drawdown season to fully accommodate fish runs, it would seem that past practice of opening one or 2 of the gates partially to facilitate such runs could be easily achieved and allowed and provided for as a part of the operational order.

When the dam was originally built, there had been a recent history of large flooding events occurring in March that were associated with the buildup of ice on the river in conjunction with rain events and the beginning of thawing of such ice. It seems readily apparent that a study of such events could easily be done with the goal of achieving a better proposed date for ending the drawdown than the seemingly arbitrary date proposed. I believe the conclusion of such a study would be that significant flooding events exacerbated by ice have generally not happened beyond April 1 and likely have never happened beyond April 15. Now there is recent history of 5 and 10 year flooding events occurring in April. These recent events have not been associated with significant ice buildup factors, to my knowledge. So it could be that ending of the drawdown in April would also then cause the need to open the gates for rain events in April. Again, a competent and objective study of such events would surely lead to a logical conclusion that would call for ending the drawdown significantly earlier than May 15 and perhaps as early as April 1.

Better still would be to allow the beginning and end of the drawdown to be determined on a seasonal basis, within established time windows, but based on actual current weather factors and other actual current circumstances such as fish runs.

Whatever operational order is determined I would suggest that such order be followed by continued monitoring of actual conditions on the river. If actual conditions on the river indicate that improvements to the operational order can be made, then such improvements should be made.

Bearing this thought in mind, the replacement of the stop-log section with some type of permanent structure would be a mistake and it should not be allowed. Retaining the stop-log structure would provide opportunity for more present and future variations to the operational order. The operational order may or may not allow for a seasonal drawdown. If it does not allow for seasonal draw-downs then the stop-logs would provide for more and better variations to any draw-downs required for maintenance or other reason. The stop-logs would also allow for more and better variations to any drawdown occurring outside of a standard seasonal drawdown. There is no reason to replace the stop-log section and many reasons to retain it. It should remain.

At section 2 of the dEIS, a misstatement of fact occurs. The term “run-of the river” nowhere appears in the original PSC permit.

The original 1937 Public Service Commission permit, provided for a fixed pool during “normal conditions”. Flood control and maintenance are two of the stated conditions, which the document cites as reasons for “operating the dam”. Normal water level is defined as 36’, according to the applicant’s datum, which is the historic natural water elevation. No other operational order was made at that time.

The only authoritative document making any recommendations as to the water level is the original permit, which was granted on May 26, 1937. (5) The permit provides for a normal water level under normal conditions and states:

“It is proposed to maintain a ***normal*** water level at approximately 36.00 feet applicants datum."

(underlining added)

It also states previous to that:

“The purpose of the proposed dam is flood control, maintaining ***normal*** water level under ***normal*** conditions, and to provide recreational facilities." (underlining and italics added)

The permit does not require that the water level be maintained continually at any specific level. Such a requirement would likely be indicated by use of the word "shall"; as in, "the water level *shall* be maintained at 36.00." The permit language deliberately allowed for broad interpretation allowing for reasonable manipulation of the water level by using the adjective "normal" to modify the term "water level". The creation of ice dams under full pool condition (36.00 ft) is not a "normal" condition. Therefore, at some point the annual drawdown was begun. Furthermore, potential flood conditions are

not "normal" conditions. Therefore it was and is perfectly within reason and lawful under the permit to open some or all of the gates when there is flood potential and for purpose of preventing ice damming. There are also records suggesting that the seasonal drawdown has been occurring since at least 1969. Historic records and photographs demonstrate that full pond conditions during winter months led to severe ice dam problems. These problems required emergency action including dynamite blasting of ice dams. The operational protocol proposed by MRPA recommended a partial winter drawdown that begins later in the year than recent practice. This protocol would alleviate spring thaw and ice dam flooding concerns while minimizing adverse biological effects of seasonal drawdown. This protocol will also have biological benefits over continuous full pool operation. I have made suggestions recommending a similar protocol above.

Furthermore, contrary to the vague statement regarding correspondence of 1986 being the first such correspondence, I am attaching correspondence from 1983 acknowledging the seasonal drawdown. (42)

The statement that the “river morphology never included a widening or ‘natural-lake-like’ feature” is not supported by the facts and should be removed.

The area upstream of the present dam did consist of a lake –like area previous to excavation of the river bed which was begun in 1933. True, the central channel through Lincoln Park did not exist, however a lake-like condition of deeper and slower moving water did exist due to the existence of a substantial rock ledge in the river channel in the vicinity of Port Washington Road. The documents provided in Attachment 2 of the EIR clearly state that the removal of the rock ledge was begun in 1933. Another document states that the removal was 50% complete by August, 1935. The 1937 aerial photograph provided which purports to prove that a lake –like condition did not exist was taken after the vast majority of the natural rock dam that previously existed and created the lake–like condition had been removed. The letter dated 9-1-39 that is included in Attachment 2 of the EIR clearly states that the dam was built to maintain a water level equal to the level that existed prior to removal of the rock ledge, as does the document included in Attachment 2 titled “Estabrook Park Dam”. Both of these documents refer to the pre-existing portion of river as a “body of still water.” MRPA has provided numerous further documents proving the existence of a lake-like condition and that the purpose of the dam is to maintain the natural historic water level. (1-4,6)Yet, none of these documents were been included in the EIR. The 1940 Wisconsin Planning Board Bulleting referred to in this section clearly states that the capacity of the channel must never be reduced, yet this entire document is clearly biased in favor of dam removal-which would substantially reduce the capacity of the channel.

There are problems with the hydraulic analyses conducted by SEWRPC. All of the 100 yr elevations portrayed in the SEWRPC analysis were higher than those portrayed in a similar study of the area performed by FEMA and completed in 2008. SEWRPC was asked for an explanation of this difference and their answer was essentially that the lake infill that has occurred since then due

to the draw down condition is the reason for this increase. Since the drawn down condition approximates dam removal conditions, this seems to indicate that dam removal will eventually lead to higher flood elevations than dam repair. Here is the question and the answer provided by Mr. Hahn of SEWRPC on August 13, 2014:

Q. " Also, how is it that the elevations in the EA analysis are almost all slightly higher than those reported in Memorandum Report 172, especially when Memorandum Report 172 claimed that there would be no change in the 1 % elevations until at least 2020? "

A. "The Milwaukee River flood flow and stage information presented in SEWRPC MR No. 172 is based on the effective model described in the September 26, 2008, FEMA FIS for Milwaukee County, which served as the starting point for the Estabrook dam EA analysis. The changes made to the effective model to establish the existing condition model in the analysis are documented on page 4 in the "Existing Condition" section of the SEWRPC Hydraulic Analysis. The change in stage at RM 6.829 can be attributed entirely to the refined representation of Estabrook dam described in the 3rd paragraph of the "Existing Condition" section. At other upstream locations, changes in stage relate to both this refined representation and other model refinements described on page 4." (16)

There have been two 100 year flood events since 1997. The June 21, 1997 peak flood elevation at the Estabrook GIS gauge was about 3/4 foot *lower* than what FEMA and SEWRPC flood models predict. The peak flow rate of that event was 16,500 cfs, 11% *higher* than the 100 yr flow rate of 14,800 cfs. The flood of July 22, 2010, which peaked at 18,200 cfs, 23% higher than 100 yr flood flow, had a peak elevation of 1/4 foot less than that of a 100 yr flood as modeled by the FEMA and SEWRPC models. (17,18)

In the below reproduced email correspondence with Michael Hahn of SEWRPC, he acknowledges that a discrepancy of close to 1 foot between actual and modeled data exists and then declares such discrepancy is "reasonable". He then makes a seemingly unfounded claim that this discrepancy further does not apply to areas upstream of the Estabrook Dam. This is rather convenient for him to say, since such statement cannot be disproved because of the fact that the next GIS gauge is at Cedarburg, far beyond the Estabrook impoundment. The specifics of the discrepancy discussed is that an actual 16,500 cfs event in 1997 measured an actual elevation of 3/4 foot lower than the FEMA 2008 modeled 100 yr elevation (14,800 CFS) at the same point, that point being the GIS gauge just downstream of Estabrook Dam.

Q. "SEWRPC used NGVD 29 in the hydraulic analysis for the Estabrook Dam EA and in SEWRPC Memorandum Report No. 172, A Watercourse System Plan for The Milwaukee River In Milwaukee County Upstream Of The Milwaukee Harbor Estuary.

According to Memorandum Report 172, a 1 % probability flood at the Estabrook Gauge has a flow of 14,800 CFS. According to USGS,NWS and FEMA data, on June 21, 1997 this gauge read 10 feet and the flow was 16,500 CFS. This flood is also documented in Memorandum Reprort 172. By adding 10 feet to the gauge height, this would indicate that this larger than a 100 yr flood had an elevation of 617.23, NGVD29.

Memorandum Report 172 states that the elevation for a 1 % flood at mile 6.829, just above Estabrook Dam, is 620.46. The analysis for the EA states that the elevation for a 1 % flood at the same point with a repaired dam is 620.68. Both studies state that the elevation for a 1% flood at mile 6.827, just below Estabrook Dam is 619.23. I am not sure of the exact location of the gauge, but according to USGS it is about 1200 feet downstream of the dam. This would put it at approvimately mile 6.60. The EA analysis does not include elevations for anything downstream of 6.827, but the Memorandum Report 172 does. The 1 % elevation at mile 6.61 is 618.45 and at 6.567 it is 617.63.

So, how is it that your 1 % flood elevations are approximately one foot higher than the actual measured elevation of a flood that was larger than a 1 % flood? "

A. "We have field checked the location of USGS gage 04087000 and confirmed that the gage house and the published coordinates are located between Milwaukee River model cross-sections RM 6.567 and RM 6.610 downstream from Estabrook dam. Based on the USGS 04087000 stage-discharge rating curve, a flow of 14,800 cfs (100-year flow) would result in a stage of approximately 616.7 feet above NGVD29. At the location of the coordinates of USGS 04087000, the 100-year stage of the FEMA FIS effective model and the model reflected in SEWRPC MR No. 172 would be about 618.0 feet above NGVD29. This difference is a reasonable correlation and calibration between modeled and measured data. In addition, this difference between the modeled and measured stage downstream of the dam would not be realized in the reaches of interest upstream of the dam due to the hydraulic effects of the dam structures."

It would seem readily apparent that a 1 foot discrepancy between actual and modeled conditions is of utmost significance, especially when the actual condition shows actual flood elevations to be significantly lower than those claimed by FEMA and accordingly, SEWRPC.

So, the SEWRPC analysis when viewed in light of the FEMA analysis shows that:

1. The entire model is flawed because it does not accurately predict actual events
2. Within the flawed model, the model shows that in-growth due to the prolonged drawdown has increased 100 yr flood elevations.

It would then follow that upon permanent dam removal, according to these models, further increase to the 100 yr elevations can be expected and that such elevations may eventually increase beyond the established limits. (16)

I applaud the dEIS for its relatively objective treatment of fish an mussels at Section 11 and elsewhere in reference to proposed operational alternatives. Nevertheless opponents of dam repair will likely seize upon these sections and possible implied implications of them in attempts to derail this project. Therefore, I offer comments in opposition to such likely arguments.

The Casper study (11) referred to as a "recent mussel study" cited by this dEIS at Section 11 directly contradicts the possibly misleading implications of this section on mussels. The Casper study unequivocally states that of the four areas of the Milwaukee River that were studied, the Lincoln Park area had the most species of dead and alive mussels by far. All of the other areas studied were downstream of Lincoln Park. It would seem then that the dam is not causing a problem. This expert report claims elsewhere that the removal of the North Ave dam was great for the environment. Yet the three areas studied by Casper that are within the former North Ave impoundment had about half the species of mussels. Furthermore, the Casper study was conducted in summer of 2012, after 4 years of continuous drawdown. There was no comparison to pre draw-down, so all implications that the drawdown has negative effect are not based on any evidence. The Casper study clearly states that there were many dead mussels found in dry backwater areas of the Lincoln Park area. The Casper study, rather than stating the obvious, that these areas were dry because of the long term drawdown, instead attempts to blame the supposed die-out on a supposed drought of 2012. The introduction of the Casper study makes it clear that many things about mussels are not known. Not all host species are known, it is not clearly known how juveniles feed, whether or not temperature affects reproduction is not really known, etc. What is known is that contaminants do affect them. Yet, the most contaminated area studied had the most mussels. No explanation for this was offered. (11)

The discussion of mussels and fish at Section 11 and other sections related to the proposed operational order alternatives is general in nature and no evidence has been presented that would substantiate any negative effects attributed to the Estabrook Dam or use of the gates thereof under various operational alternatives. What are the host fish for these particular mussels? Which of these host fish, if any, are impacted in movement by the dam? If fish are restricted in movement by the dam, why are there more fish and mussel species upstream of the dam than downstream? How is it that a DNR employee in the past called Estabrook Dam a "complete barrier" to fish movement (10) when elsewhere the DNR claims that opening of the North Ave Dam opened up 30 river miles to salmonid migration and now claims that it is not a complete barrier? (31,32) How is it that Estabrook passage is so important to the sturgeon being reared 50 miles upstream when they clearly will never get past the "complete barrier" at the Grafton dam? If any host fish are in fact restricted in movement, what proof is there that this restriction in movement actually affects the mussels? Is fish movement up or downstream necessary to mussel larvae? Or do the larvae simply need something to feed on? If movement is

necessary, what proof is there that movement beyond the supposed barrier is necessary? There is no substantial evidence that impacts of the dam under any of the proposed operational alternatives would have such an impact on fish and mussels as to require removal of the dam.

Repectfully Submitted this 6th day of April, 2016, by

Brian Kreuziger
706 West Rock Place
Glendale, WI 53209

References

1. Ullius, F.W., Special Assistant Engineer, Civil Works Administration, City of Milwaukee. *Letter to Mr. D.S Teter, Project Engineer,* April 23, 1934.
2. Author unknown, possibly Milwaukee County Parks Department, Proposed Dam, Estabrook Park, Milwaukee County. Alternate title: Job 8. Form 7 No.122 Estabrook Park SP-5, Circa. April, 1937, Appears to be the final proposal submitted to the PSC as part of the dam permit approval process. Refers to CCC camp SP-5, which was the Estabrook Park camp and appears to have been accompanied by an April, 1937 approving document of an engineer that names several regional and state governmental authorities.
3. Johnstone, L.I., Assoc. Engineer, Field Technician's Comment, April 19, 1937.
4. Milwaukee County Park Commission, Estabrook Park Layout Plan for Milwaukee River Channel Deepening. December 6, 1933, approved January, 1934.
5. Public Service Commission of Wisconsin, In the matter of the application of Milwaukee County to construct, operate and maintain a damin the Milwaukee River near the City of Milwaukee, to be known as Estabrook Park Dam, for the purpose of flood control, maintaining normal water level under normal conditions,and to provide recreational facilities and to remove rock ledge in river bed above dam in aid of flood control and navigation., May 26, 1937
6. A. Glamm, F.C., Progress Report Bureau of Engineers Project 40-B14-106 Month of August, 1935, August, 1935. Accompanied by:
   B. Unknown Author, W.E.R.A. Proj. #40-B14-105 July 16,1935 Removing Rock-Milwaukee River, July 16, 1935

10. Warzyn, Will. Statement at Milwaukee County Parks, Energy and Environment Committee meeting. March 24, 2009.

11. Mussels of the Milwaukee River Greenway: A Preliminary Survey, Gary S. Casper, Great Lakes Ecological Services, LLC; and Jason M. Dare, Dare Ecosystem Management, LLC, March 6, 2013.

16. Hahn, Michael G. Email to Kreuziger, Brian, August 13, 2014.

17. Goebel, Glen. Estabrook GIS Gauge data July 22-23, 2010.

18. National Weather Service. Historical Crests for Milwaukee River at Milwaukee-Estabrook Park, Retrieved 2-13-14 from:http://water.weather.gov/ahps2/crests.php?wfo=mkx&gage=meew3

31. Wolski, Kathleen and Warzyn, William. "River on the rebound", *Wisconsin Natural Resources magazine, April 2005,* retrieved 4-30-15 from http://dnr.wi.gov/wnrmag/html/stories/2005/apr05/river.htm

32. "Case Study- North Ave", http://ua.dnr.wi.gov/org/water/wm/dsfm/dams/removal.html, no longer available

42. 1983 DNR internal memo acknowledging annual drawdown

RIVER
REVITALIZATION
foundation

2134 N. Riverboat Rd.
Milwaukee, WI 53212
414-271-8000
www.riverrevitalizationfoundation.org

February 16, 2015

Sup. Theo Lipscomb
Milwaukee County Board
901 N. 9th St. #201
Milwaukee, WI 53233

Dear Mr. Lipscomb,

As Milwaukee's urban rivers land trust, I am writing again on behalf of the River Revitalization and its board of directors to request that you sustain the County Executive's veto to fund repair of the Estabrook dam and to express continued support of the recommendation by Milwaukee County Parks to **remove** the Estabrook Dam. The health of the river, its adjoining lands, and the vitality of the ecosystem and the watershed are of utmost importance to this region. This action aligns with our mission and the recommendations of the 1991 **Riverway Plan** to make decisions that improve the environmental quality of the Milwaukee River Basin.

The executive summary of the **Riverway Plan** is enclosed here, published by the Milwaukee River Revitalization Council at the request of Gov. Thompson in the 1980s and advisory to the Department of Natural Resources. **Note within the plan the negative impact of impoundments to the health of the watershed.**

Thank you for your diligence to consider all the information provided to make a decision that is best for our environment, community and quality of life.

Respectfully,

Kimberly A. Gleffe
Executive Director

Enc.

142

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Bill Boppre	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: wrboppre@gmail.com	Telephone number (include area code): ( )
Address: 255 W. Nicolet Ct. Glendale 53217	
City, State and zip code: Glendale 53217	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

I don't see the need to have a dam. It's expensive and not good for the environment. Please consider removing the dam, and save tax payer dollars and help the environment.

Thank you for your time on this.

37

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name:	Do you wish to make an oral statement? (Check one) ☐ Yes ☑ No
HELGA GUEQUIERRE	
E-mail: hguequierred@sbcglobal.net	Telephone number (include area code): (414) 225 0460
Address: 1313 N. FRANKLIN PLACE #1101	
City, State and zip code: MILWAUKEE WI 53202	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

The dam should definitely be removed. In keeping with current thinking dams are removed to improve habitat; prevent flooding and, in this case, to save taxpayers' money.

39

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Denis Guegoierre	Do you wish to make an oral statement? (Check one) ☐ Yes ☐ No
E-mail:	Telephone number (include area code): (414) 325-0466
Address: 1313 N. Franklin Pl. #1101	
City, State and zip code: Milwaukee 53202	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

This dam should be removed for economic, environmental and recreational reasons. There is no logical reason to keep this ~~maintain this~~ dam,

35

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: David Raschke	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: djraschke@gmail.com	Telephone number (include area code): ( )
Address: 1920 N. Farwell	
City, State and zip code: Milwaukee, WI, 53202	

Written Comments Removal is the best environmental option.

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Chris Keene	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: chris@keenedesign.net	Telephone number (include area code): ( )
Address: 4365 Glenway St.	
City, State and zip code: Wauwatosa, WI 53222	

Written Comments Please remove the damn!

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

182

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: NANCY WILLERT	Do you wish to make an oral statement? (Check one) ☐ Yes ☐ No
E-mail: nancywillert@gmail.com	Telephone number (include area code): (414) 534-2225
Address: 3051 N. Gordon Circle	
City, State and zip code: Milwaukee, WI	

Written Comments

I felt it is fiscally and environmentally irresponsible to keep + repair the dam a free river will yield beauty for everyone

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

218

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: JEN DAOOD	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: jtdaood@gmail.com.	Telephone number (include area code): (414) 617 7428.
Address: 950 West Riverview Dr (I live on the river).	
City, State and zip code: Glendale, WI 53209	

Written Comments: Please remove the dam! Thank you.

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

240

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: STEVEN ALT	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: LIGHTGUY7@ATT.NET	Telephone number (include area code): ( )
Address:	
City, State and zip code: GLENDALE	

Pull the DAM.

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

192

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

State of Wisconsin
Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name:	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
Molly Savage	
E-mail: molly.baker@yahoo.com	Telephone number (include area code): (612) 483 0204
Address: 838 W Riverview Dr	
City, State and zip code: Glendale, WI 53209	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

I support REMOVAL of the Estabrook Dam. Data supports that this is the most environmentally and fiscally responsible solution to abate the dam's current condition. Please preserve the sensitive ecosystem that is the Milwaukee River

200

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name:	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
EMMANUEL HESS	
E-mail: sewshal@gmail.com	Telephone number (include area code): (773) 383-6113
Address: 841 W RIVERVIEW DR	
City, State and zip code: GLENDALE WI 53209	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

It is irresponsible to let short term politics trump long term wisdom. Repairing the dam does not make environmental or fiscal sense.

93

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Franz Meyer	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: franzformilwaukee@gmail.com	Telephone number (include area code): (414) 544-0440
Address: 2935 S. Herman St. Milwaukee WI 53207	
City, State and zip code: Milwaukee 5	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

Do not Rebuild the Dam.

183

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: GARY MIKOLAJCZYK	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: CZYKS8@AOL.COM	Telephone number (include area code): (414) 282 3310
Address: 2319 W Bridge ST	
City, State and zip code: MILWAUKEE WISC 53221	

Written Comments IN SUPPORT OF TEARING DOWN the DAM.

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

185

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: MARY MANES	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: MARYMANES@YAHOO.COM	Telephone number (include area code): (414) 352-8269
Address: 806 W LASALLE AVE	
City, State and zip code: GLENDALE WI 53209	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

"TAKE IT DOWN"

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: Paul Phelps	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: pflaps@earthlink.net	Telephone number (include area code): ( )
Address: 4603 N. Morris Blvd.	
City, State and zip code: Shorewood, WI. 53211	

Remove the dam please.

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Harold Schmidt	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: SCHMIDHO@Yahoo.com	Telephone number (include area code): (414) 933-4512
Address: 1230 N. 46TH St.	
City, State and zip code: Milwaukee WI 53208	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

on behalf of the Friends of Estabrook, we ask that you remove the dam.

171

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: MARY SCOTT	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail:	Telephone number (include area code): ( )

Address: 1610 N. PROSPECT AV #1003

City, State and zip code: MILWAUKEE, WI 53202

Written Comments: against repair ~~of~~ replacement of dam

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

175

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: JOHN BECKER	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: johnbecker@ameritech.net	Telephone number (include area code): ( )
Address: 1610 N Prospect #1003	
City, State and zip code: MILW 53202	

WANT DAM REMOVED. LAND ABOVE OLD NORTH AVE DAM IS PRICELESS.

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: Dan Larson	Do you wish to make an oral statement? (Check one) ☐ Yes ☑ No
E-mail: d.k.larson25x@gmail.com	Telephone number (include area code): ( )
Address:	
City, State and zip code:	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

I think the Dam should be removed. Public funds to make sure Glendale residents can use motorboats on an artificial lake is not an acceptable use of millions of dollars of public funding.

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Gregory F. Bird	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: tomberthenfo@gmail.com	Telephone number (include area code): ( )
Address: 2230 S. Woodward ST	
City, State and zip code: MKE 53207	

Written Comments: remove dam, generate electricity ~~from~~ using floating devices

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Andrea Weissgerber	Do you wish to make an oral statement? (Check one) ☐ Yes ☑ No
E-mail: andiweissgerber@yahoo.com	Telephone number (include area code): (414) 940-2720
Address: 700 W. Laramie Ln.	
City, State and zip code: Milwaukee, WI 53217	

Written Comments For Complete Removal of the dam!

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

State of Wisconsin
Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Jessica Ginster	Do you wish to make an oral statement? (Check one) ☐ Yes ☐ No
E-mail: jessica.ginster@gmail.com	Telephone number (include area code): (414) 510 9808
Address: 6523 N Sunny Point Rd	
City, State and zip code: Glendale WI 53217	

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

Nature should always win
Down with the Dam.

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

State of Wisconsin
Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Sue Kelley	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: skelley1@wi.rr.com	Telephone number (include area code): ( )
Address: 2216 E Stratford Ct	
City, State and zip code: Shorewood WI 53211	

Written Comments: Please remove the dam for both financial & environmental reasons.

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

83

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Sally Callan

Do you wish to make an oral statement? (Check one) ☐ Yes ☑ No

E-mail: callanscholbie @ hotmail.com

Telephone number (include area code): (   )

Address: 5417 N. GreenBay Ave

City, State and zip code: Milwaukee WI 53209

social History of Milw - parks as public Health - access for all

Written Comments please no motors no wake - save the $ we spend on cleanup + provide access for all not just a few home owners own docks + boats.

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

- or motor boat access for all - public
+ consider option A - water health or removal not water + wealth.

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources 28

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

MEETING APPEARANCE

PLEASE PRINT:

Name: Sam Emmons	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: emmonssamuel@gmail.com	Telephone number (include area code): (414) 915 9607
Address: 1011 W Montclaire Ave	
City, State and zip code: Glendale WI 53217	

Another hearing? - The county board has approved the repair and winter draw-down of the Estabrook Dam. The funds have been approved. The environmental studies are done - time to move forward!

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Sam

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

194

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Bob Greene	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: BobGreene@WIRR.com	Telephone number (include area code): 414 651-9757
Address:	
City, State and zip code: Milwaukee 53208	

Written Comments: Rebuild the dam & do the Fish Ladder in place

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

65

State of Wisconsin
Department of Natural Resources

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Aaron Morgan	Do you wish to make an oral statement? (Check one) ☐ Yes ☑ No
E-mail: hamborgar26@yahoo.com	Telephone number (include area code): (414) 531-7451
Address: 2623 N. 4th St.	
City, State and zip code: Milwaukee, WI 53212	

would like to see it get Repaired

Written Comments

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

107

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

State of Wisconsin
Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: SCOTT C. KUESEL

Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No

E-mail:

Telephone number (include area code): ( )

Address: 6365 N. SUNNY POINT RD.

City, State and zip code: GLENDALE, WI 53217

Written Comments: THE SINGLE MOST IMPORTANT REASON TO SAVE THE DAM IS THAT IT AFFORDS AN ECONOMICAL WAY TO TRAP AND REMOVE MAN-MADE AND NATURE DEBRIS AND SEDIMENT FROM REACHING THE HARBOR AND LAKE

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov , *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

243

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

State of Wisconsin
Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Christine Gaffney	Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No
E-mail: riverhouse511@att.net	Telephone number (include area code): (414) 961-8937
Address: 511 W. Montclaire Ave.	
City, State and zip code: Glendale WI 53217	

Written Comments

I am a resident and homeowner on the river. I am in favor of dam repair with fish ladder creation and operation of the dam to normal pool (river) levels. This issue has been going on a long time and needs to be resolved!

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Wendy Wehring

Do you wish to make an oral statement? (Check one) ☐ Yes ☒ No

E-mail:

Telephone number (include area code): (414) 228-8642

Address: 1730 W Lapham Ave

City, State and zip code: Milwaukee WI 53209

Written Comments Don't remove the Dam!

Please submit the comment form and deposit at the scoping session, *or*

Email comments to DNREstabrook@wi.gov, *or*

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

20

PLEASE COMPLETE AND SUBMIT THIS APPEARANCE FORM

Department of Natural Resources

MEETING APPEARANCE

Personally identifiable information collected on this form is used for administrative purposes and may be provided to requesters under the public records laws, ss. 19.31 to 19.39, Wis. Stats.

PLEASE PRINT:

Name: Mioskowski, Beverly

Do you wish to make an oral statement? (Check one) ☐ Yes ☐ (No) [circled]

E-mail: bmioski@mac.com

Telephone number (include area code): ( )

Address: 1108 W. River Park lane

City, State and zip code: Glendale, WI 53209

Written Comments

Please submit the comment form and deposit at the scoping session, or

Email comments to DNREstabrook@wi.gov, or

Mail to: Kristina Betzold,
Department of Natural Resources,
2300 N. Dr. Martin Luther King Jr. Drive,
Milwaukee, WI 53212

(1) Repairing the damn for the Rich: Travel down Glendale Ave + Then River Park Blvd to Actually see all those "mansions of the Rich"

(2) Have gone to only 2 baseball games since the Braves left Milw; have not been to a Bucks game since Lew Alcindor (yes, I know that's no longer his name) played here — BUT my taxes are being used to pay for stadiums I never use.

Kristina Betzold
Department of Natural Resources
2300 N Dr. Martin Luther King Jr. Dr.
Milwaukee, 53212

April 5th, 2016
700 West Rock Place
Glendale, Wisconsin 53209
414-332-7090
ggoebel1@wi.rr.com

Regarding: EIS comments

Dear Ms. Betzold,

Here are my comments regarding the Draft Environmental Impact Statement for Estabrook Dam.

- I am in favor of repairing the Estabrook Dam
- I support Alternative 1: Full Winter Drawdown, but would much prefer Partial winter drawdown if and only if a short period of full drawdown were provided for shoreline maintenance each year.
    - I believe some sort of winter drawdown is needed for safety. Ice buildup would be less likely and those who fall through thin ice would not likely drown or be carried under in shallower water.
    - I believe a short period each of full drawdown is needed each year for affordable shoreline maintenance. Maintenance including seawall and storm sewer work would cost prohibitive if sea walls and storm sewers were immersed. If the period of full drawdown were limited to 2 or 3 weeks, and were delayed until warmer weather of late March or mid-April, impacts to aquatic and amphibious species would be minimized.
    - Recreational use would benefit if full pond conditions were extended at least a month longer than the May 15th to September 15th period suggested in the "Manipulation of Aquatic Resources Alternatives #1 and #2. Normal water elevations on adjacent and other reaches as well as the Estabrook impoundment normally fluctuate significantly anyway, according to USGS historic data. Autumn is historically a lower flow time with reduced water elevation in adjacent reaches. Macroinvertebrate and several amphibious species could more easily adjust to partial drawdown than full winter drawdown. For these reasons, I believe the impoundment would benefit from a mid-level elevation protocol dropping water elevation no more than 6" per day from September 15th through early spring period.
- I believe Milwaukee County and the DNR should take a much more adaptive approach in developing operational protocol and management of the dam, through collaboration with the most affected stakeholders, including those who live along the river and who recreationally use the river most. Goals of the community as well as actual outcomes will undoubtedly be different than the ones imposed through the processes involved in developing this draft EIS.

Regarding completeness and accuracy of the dEIS:

- Navigational use has been misstated in the dEIS to have spanned a much shorter area than has been widely practiced. Use of deeper draft and motorized boats including large pontoon boats has extended upstream from the dam, contiguously to within 250 yards of the Bender Road Bridge during times of full pool.

    Use of power boats as well as row boats kayaks, jet skis and other vessels, all of which formerly plied these waters, would not be possible during most summer months if the dam were removed. The dEIS only discusses deeper draft vessels with regards to early fall and low flow river conditions but fails

to state **that deeper draft vessels could not possibly operate on the impoundment during any conditions other than spring or high water conditions without the dam operating at full pond**.

- Spokespeople for Milwaukee County Parks Department, especially Kevin Haley, often and publicly made their preference for dam removal known. Parks department preference for removal has resulted in disregard of information contrary to their goal of dam removal as well as extended delays. Predicted flood probabilities due to overgrowth of the channel, reduced recreational availability, and upstream costs associated with removal have not been reported or minimized. Unfrank repair operation and maintenance costs of the dam have been inflated in Parks and AECOM documents. These false figures have been compounded with interest to portray a disproportionately high cost of repair and absurdly low cost or removal to the public, and those portrayals are often repeated by the media and by the county executive to politicize the dam and sway public opinion against repair. The restoration project was passed by Milwaukee County Board of Supervisors. Costs were funded since 2009 but Milwaukee County Parks has delayed the restoration of this lake needlessly and used supposed US Bureau of Land Management ownership as well as PCB cleanup work as excuses to delay repair for nearly 8 years. **To provide even handed reporting of the alternatives, please instruct the county to provide all costs for removal, including upstream restoration into the removal cost portrayals and to remove unrealistic costs, such as in-person live monitoring from repair cost portrayals.**
- Please change the statement from "BLM **is no longer** an agency having regulatory authority for the project. Even though they erroneously claimed it, BLM **never had authority** of the dam. BLM was told by Milwaukee County Parks that they owned part of the dam, and consequently interfered in progress for several years. MRPA supplied proof of county ownership several years before BLM finally relinquished their attempted land grab.
- Page 2, paragraph 2 of the dEIS states that the river never included a natural lake-like feature. Please remove that false statement from the final EIS document. Here is one of several historic references cited from Department of the Interior, National Parks Service, who built the dam "***River level of 36 feet (Datum) is the same as what it was before the rock ledge was removed. The lake to be formed is not new but is the lake as it existed before the rock ledge was removed."***[i] More proof could be found in the numerous photos available at the Milwaukee County Historical Society showing swimming and boating activities, at several beaches along the impoundment lake, prior to construction of the Estabrook Dam. Those activities would not be possible in a shallow water river, such as upstream or downstream from the lake.
- Flood potential is <u>not</u> an impact of dam restoration. Several dam repair opponents spoke at the dEIS hearing with claims of flood relief if the dam would be removed. MMSD stated 391 structures are in the floodplain but none would be removed from the floodplain if the dam were removed.[ii] Numerous attempts to correct flawed data used by SEWRPC in their hydraulic have been disregarded, even when delivered by certified mail. The incorrect application of data resulted in erroneous flood profiles due to their use of inappropriate roughness coefficients for the shoreline. An actual 200-year-flood in 1997 did not result in flooding at levels nearly as high as those predicted by the model. MRPA provided detailed documentation to the County as well as to SEWRPC which they claimed was significant, but then did not quantify the claim, only spent a few hours on site and applied a much diminished roughness coefficient rather than the one prescribed by the Gauckler–Manning formula for open channel flow. SEWRPC claimed to have used the Gauckler–Manning formula as the basis of calculation for their analysis. **Please address the flood concern in the final EIS by stating that no structures would be impacted by this repair**. In addition, all present structures built on the flood plain have been built with knowledge and after the flood plain designation of those sites were already established. Continuation of

the normal and historic conditions is should not be considered an impact but rather normal, natural equilibrium of the area.

- An ongoing court case revealed that county predictions of lowered water quality as well as the resultant biological effects associated dam removal were not based on the available data for this area, but rather from data from outside the impounded area. Water temperature during warm weather, dissolved oxygen fluctuations and turbidity data have been recorded prior to and during dam drawdown by Water Action Volunteers, trained by Wisconsin Department of Natural Resources and the University of Wisconsin Cooperative Extension. MMSD has collected and retained even more detailed data. Those data sources may not have been chosen because they would not support claims that water quality diminished in the Estabrook Dam impoundment during full pond. While water quality is a factor with some other dams, **no consistent correlation between water quality and dam operation could be shown relating to the Estabrook Dam impoundment**. The opposite, unsubstantiated claim was erroneously made by several dam opponents at the dEIS hearing.
- "Risk of Repair with Fish Passage" listed in the dEIS was based on the above mentioned SEWRPC hydraulic analysis, which, compared with actual flood data has already been shown to be incorrect.
- **Please remove reference to species that have not been found in this or adjacent reaches of the Milwaukee River** including Redfin Shiner, Longear Sunfish, Striped Shiner, Butler's garter snake, Spike, Lilliput and Ellipse muscles. If dropping water elevations would have brought those species to this formerly naturally impounded still-water environment, No evidence of live specimens were not found in this area even though the dam was drawn down for 7 ½ years. Drawdown conditions are essentially the same conditions as would be present if the dam were removed. Other still-water drainage lakes exist on the Milwaukee River, and this drainage lake has been in existence for all of recorded history, so these species should not play a role in this EIS. The dEIS suggests some of these species may have lived in the impounded area based on the presence of shells. Significant fill and other manipulations of the soil have been done throughout the area, which could have brought those artifacts to the area. Downstream migration of these artifacts would be another plausible reason for their presence in the area. Shells certainly would not be found on the surface, intact and identifiable that predated construction of the Estabrook Dam or the complete channel reconstruction of the 1930s. Indications that these species would inhabit the area in the future are not strong enough to be included in this study**. I request conjecture regarding these species be removed from the report.**

Regarding costs, offsetting tax revenues and economic impacts

Costs were not discussed in the dEIS document but cost concerns have been prevalent and ever present in all documents leading up to this point including "Addendum No.2 Environmental Impact Report for Estabrook Dam, Milwaukee County, Wisconsin Prepared by Don Pirrung, AECOM. Opponents of repair have stated they intend to influence Milwaukee County to reverse the plan to repair the dam. For this reason I am addressing costs in this series of comments. **Please state in the final EIS that upstream cost impacts have not been addressed in the document resulting in actual costs of repair or removal being different than previously portrayed by the county.**

- Operation and Maintenance costs portrayals have been inflated for Estabrook Dam with the effect of making repair appear to be cost prohibitive. Specifically the one hundred thousand dollar per year O & M cost of having an operator monitoring the dam. Normal procedure of most similarly large dams includes automation and remote control, as with DNR, Army Corps of Engineers, and Tennessee Valley Authority dams. Estabrook Dam has been operated as an automated dam for 7 years, beginning in 2000

without incident. Manually monitoring the dam would be less dependable and financially disadvantageous. It just costs more.

- Property value concerns and data that were delivered have been disregarded by Milwaukee County Parks Department. The studies that Parks cited as supporting evidence that property values would not be negatively affected, warned that *"The conclusion* [of no diminished value] *should not be extended to large impoundments where such activities as fishing, boating and swimming are especially attractive."* [iii] The study was misapplied as a tool to attempt to support a dam removal agenda. Multiple, more applicable sources suggest property values, as well as the related tax revenues derived from navigable frontage is 22-40% higher than on unnavigable water ways. MRPA has delivered several documents which refute the county's valuation claims several times over the years but they have not been acknowledged or used or refuted.
- "Other costs" including upstream restoration costs, which result from dam removals, and normally amount to 20-30 times the physical removal cost have not been acknowledged in this report. Municipal storm sewer outfalls as well as Wisconsin DOT, Milwaukee County Park and private shoreline costs, if addressed, would undoubtedly be several millions of dollars. Property owners will seek remedy from the county for these costs.
- Legal notice was given to Milwaukee County that property owners intend to file suit for loss of navigational rights and for unauthorized taking of property value. The suit would involve several million dollars and would likely be costly to defend against.

Please use these comments in developing the final EIS. If asked, I would make my source documents available for inspection. I would like this letter to be available as a public record if requested. I would also be delighted to answer or respond to any questions or comment about what I have said here

Sincerely,

Glen Goebel

---

[i] Department of the Interior, National Parks Service, Project SP-5 Job No. E. C. W. 123, Proposed Dam, Estabrook Park, Milwaukee County (with Field Technician's comments) Park Authority, April 19, 1937 pg. 3, par. 3

[ii] MMSD file 15-053-5, May 4,2015, pg. 3, par. 2

[iii] Does Small Dam Removal Affect Local Property Values? An Empirical Analysis, Provencher, Sarakinos, Meyer, 2006 pg.14, par. 3

OFFICE OF CORPORATION COUNSEL

PAUL BARGREN
Corporation Counsel

COLLEEN A. FOLEY
PAUL D. KUGLITSCH
Deputy Corporation Counsel

TIMOTHY R. KARASKIEWICZ
MOLLY J. ZILLIG
ALAN M. POLAN
JENNIFER K. RHODES
DEWEY B. MARTIN
JAMES M. CARROLL
KATHRYN M. WEST
JULIE P. WILSON
CHRISTINE L. HANSEN
Assistant Corporation Counsel

April 5, 2016

Via email to DNREstabrook@wi.gov

Kristina Betzold
DNR
200 N. Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53212

Re: Comments on Estabrook Dam, Milwaukee Co.

Dear Ms. Betzold:

This letter from Milwaukee County responds specifically to comments in a letter dated March 25, 2016 ("Letter"), and submitted by Attorney Joseph R. Cincotta to Tanya Lourigan on behalf of Milwaukee Riverkeeper. Riverkeeper's Letter raised several points regarding Wisconsin statutes that are in error.

1. Wis. Stat. § 31.38 is not a requirement

Riverkeeper contends that Milwaukee County's repairs of the Estabrook Dam must proceed only under Wis. Stat. § 31.38. In Riverkeeper's view, this means the County must create a special assessment district to fund the repairs and must go through a plan-approval process that, in Riverkeeper's view, has not been completed. *See* Letter at 3-4.

Riverkeeper's analysis is incorrect.

First, the County is proceeding with repairs on the dam because it was ordered by the Milwaukee County Circuit Court to abate the nuisance. Wis. Stat. § 31.38 is irrelevant to that court-ordered relief. Riverkeeper brought its 2011 lawsuit against the County under Wis. Stat. § 31.25, which declares any dam constructed or maintained in violation of Chapter 31 to be "a

public nuisance, and the construction thereof may be enjoined and the maintenance thereof may be abated by action at the suit of the state or any citizen thereof." It is under that authority, not § 31.38, that the Court ordered Milwaukee County in 2012 to repair or remove the dam. The limitations of § 31.38 are irrelevant to the County's requirement to comply with the injunctive command in the Order to abate the nuisance.

Second, § 38.31 is a permissive, not mandatory, path for a county to use to build or maintain a dam through a special assessment district. Riverkeeper ignores the operative word in Wis. Stat. § 38.31: "may." Section 38.31(1) states (emphasis added):

> Every municipality **may**, subject to this chapter, authorize the acquisition, construction, maintenance or repair of dams across any lake or stream adjoining or within the limits of such municipality, and may locate such dam within or without such limits.

"May," as used in § 31.38(1), is used to grant permission or to indicate possibility, not to impose a requirement.

It would make no sense for the legislature to require a special assessment district to be formed for repairs on an existing dam. Section 31.38 was added to the statutes in 1959, more than 20 years after construction of the Estabrook Dam. Laws of 1959 ch. 441 § 9 (creating § 31.38). Imposing a special assessment district requirement for repairs on existing dams is illogical. Sub(1) of § 31.38 states that a municipality "may locate such dam within or without" its municipal limits (emphasis added). This is consistent with a statute aimed at dam construction, not dam repair.

Language elsewhere in Chapter 31 shows § 31.38 is an alternate approach to funding dam work, not the only approach. Wis. Stat. § 31.06(3)(b) states that the DNR "shall" grant a permit for a dam on public land if hearings show the dam is in the public interest and if the finance requirements of § 31.14(2) or (3) are met.

Here, § 31.14(2) is the key, because sub. (2)(a) allows the applicant to show financial responsibility (emphasis added) "**either** by the creation of a special assessment district under ss. 31.38 and 66.07073 [the bond provision], **or** by any other means which in the department's judgment will give reasonable assurance that the dam will be maintained for a reasonable period of time not less than 10 years." By its terms. § 31.14(2) shows that § 31.38 is not the only route available to the County.

Third, aside and apart from § 31.38, the County has direct statutory authority to repair the dam. Specifically, the County is empowered by statute to

> Construct, purchase, acquire, lease, develop, improve, extend, equip, operate and **maintain** all county buildings, structures and facilities hereinafter in this subsection referred to as "projects", including without limitation … **dams in county lands**…

Wis. Stat. § 59.52(6)(d)1 (emphasis added).

Having been awarded the power to maintain its assets, including dams, the County has direct statutory authority to levy taxes or issue bonds to carry out that purpose, without need to resort to § 31.38. "[T]he board of any county is vested with all powers of a local, legislative and administrative character … and for such purposes to levy county taxes, to issue bonds, assessment certificates and improvement bonds, or any other evidence of indebtedness." Wis. Stat. § 59.03(2).

Moreover, in order to "give counties the largest measure of self-government under the administrative home rule authority granted to counties in s. 59.03 (1)," the authority and the taxing and bonding powers under Chapter 59 "shall be liberally construed in favor of the rights, powers and privileges of counties to exercise any organizational or administrative power." Wis. Stat. § 59.04. This statutory authority shows that the County is not limited to just one path forward on dam repair.

2. The County is able to provide reasonable financial assurance

Riverkeeper appears to challenge either the County's financial ability to maintain the Dam after repair or the DNR's involvement in assuring same. Letter at 4-5. There can be no doubt that the County has provided "reasonable assurance that the dam will be maintained for a reasonable period of time not less than 10 years," as required to satisfy Wis. Stat. § 31.14(2)(a). As the County's submissions show[1], continuing annual costs are projected at about $160,000, of which $51,000 is funded through dedicated television tower receipts, leaving about $110,000 to be paid for yearly out of general County operating revenues. In addition, when the Dam is ready to begin operations, there will be about $250,000 in a trust fund from the tower receipts that can be amortized toward operations costs. Relying on the full faith and credit of Milwaukee County to include the almost negligible increment of about $110,000 in a yearly County budget of $1.37 billion (including a Parks Department budget of $49 million) is much more than "reasonable assurance" upon which the DNR can rely.

3. Repair of the Dam is a public purpose for which public funds may be spent

Riverkeeper argues that repair of the Dam is intended only to "provide enhanced recreational benefits to a very small population of private property owners" and therefore is an illegal expenditure of public tax dollars for a non-public purpose. Letter at 5-6. This is incorrect, both as a statement of the results of the repair and as a statement of the law of public spending.

First, repair will result in public benefits. As the DNR states in its own description of the project, the goal of the repair project is to "improve the Milwaukee River ecosystem as well as balance the needs of riparians, recreational users and Milwaukee County." Draft EIS at 3, http://dnr.wi.gov/topic/eia/estabrook.html The proposed alternative "should increase the diversity and population of fish upstream of the dam[,] … increase the probability of developing sustainable populations of lake sturgeon and walleye within the watershed" and enhance recreational fishing opportunities, *id.* at 17, all of which are beneficial public purposes. Testimony at the March 22 public hearing on the draft EIS included witnesses from the Friends of Lincoln Park and others in the upstream neighborhoods who stated that repairs to the Dam would result in recreational and scenic improvements, which, again, are beneficial public purposes for which public funds may be spent..

Second, as a matter of basic statutory authority, Chapter 67 of the statutes addresses public borrowing. Under Wis. Stat. § 67.04(2)(a), the county "may borrow money and issue bonds to finance any project undertaken for a public purpose."

"Public purpose" is specifically defined to mean "the performance of any power or duty of the issuing municipality." Wis. Stat. § 67.04(1)(b). Since, as noted above, a county specifically holds the statutory power to "maintain … dams in county lands…," Wis. Stat. § 59.52(6)(d)1, the County's exercise of the power to maintain dams is a "public purpose. To cement the

[1] County EIS/EIR at 2-16 http://dnr.wi.gov/topic/EIA/documents/Estabrook/EstabrookEIR.pdf

definition, "project" is defined in the borrowing statute to include the "renovation, rebuilding, repair or improvement of … property, … equipment or facilities." Wis. Stat. § 67.04(1)(ar). And, finally, to remove any doubt, "[t]he legislature finds that contracting of debt under this chapter for any project constitutes a public purpose." Wis. Stat. § 67.04(4).

There is no doubt that the simple act of repairing a dam is a public purpose, for which public funds may be spent. Riverkeeper's "private use" theory is simply mistaken.

Please feel free to contact either one of us if we can be of any additional assistance.

Very truly yours,

Paul Bargren
Corporation Counsel

Paul D. Kuglitsch
Deputy Corporation Counsel

cc: Atty. Joseph R. Cincotta (via email)

milwaukee RIVERKEEPER®
Waterkeeper® Alliance member

1845 N. Farwell Avenue • Suite 100 • Milwaukee, WI 53202
ph 414.287.0207 • fax 414.273.7293 • milwaukeeriverkeeper.org

April 6, 2016

Kristina Betzold
Environmental Analysis and Review Specialist
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53212

Dear Kristina,

On behalf of Milwaukee Riverkeeper, we submit the following comments on the Wisconsin Department of Natural Resources' (DNR or Department) Environmental Impact Statement (EIS) for the Estabrook Dam (Dam). In sum, the most economically responsible and environmentally sound alternative for the Milwaukee River, its users, and taxpayers is removal of the Estabrook Dam. Our comments are detailed below and organized by section of the EIS. Additional procedural concerns were submitted in a separate letter to the DNR by Attorney Joe Cincotta of Kerkman and Dunn dated March 25, 2016.

Overview of the Proposal

DNR issued an Administrative Order on September 26, 2008 ordering Milwaukee County to drawdown the impoundment due to safety concerns, and the Dam has been opened for nearly 8 years. The DNR issued a Repair or Abandon Order for the Dam on July 28, 2009.

DNR has taken the position that under state regulations only the preferred alternative submitted by Milwaukee County can be considered, which is dam repair with fish passage. On the contrary, Chapter 31 of the State Code, particularly Chapter 31.02, gives the Department broad jurisdiction over dams and dam actions so as to protect public rights and the public trust, and to protect life, health, and property. Additionally, WEPA/NEPA requires that all alternatives be considered when conducting an EIS.

DNR states that neither repairing the Dam nor establishing an operating order for water levels or flows requires an EIS under NR 150.20 as those actions are considered as a "minor action" and "Integrated Analysis" action, respectively, but that the Department has "elected to use the EIS process to facilitate public review." Even though the statute states that these types of actions don't require an EIS, DNR has essentially decided to go forward with an EIS, ostensibly because of the long history and contentiousness of the issue, and the required involvement of other federal agencies. The Department should have included analysis of all other reasonable alternatives such as dam removal or construction of a rock

ramp, both of which would be better environmentally and socioeconomically and at a lower cost to state and county taxpayers than repair with fish passage.

The DNR has not substantiated why it has classified this project as a "minor action" under federal NEPA rules. The extended period of time that the Dam has been out of operation, the risk of upstream flooding and drainage damage, and significant environmental effects posed by dam repair and operations all support that this is a major action. The Army Corps of Engineers will need to review the fish passage design and water level impacts, as well as the other permits referenced in the Section 3 Authorities and Approvals section of the EIS. To treat this project like a simple permit renewal violates the DNR's authority and responsibility under federal and state law.

In addition, significant federal and state funding is being allocated toward this repair project as part of the state dam safety and stewardship grant programs and by the US Fish and Wildlife Service for the fish passage. Federal coordination with the state will be required and for that reason, the DNR should include consideration of other alternatives in the EIS.

Furthermore, Milwaukee County's past failure to operate and maintain the Dam or address past repair orders from the Department going back to 1995, is further evidence that the County lacks wherewithal to adequately fund, inspect, operate and maintain this structure in a way that will protect both human and wildlife populations. While we will discuss this issue more below, this is not a simple dam repair or changing out some bolts and rebar, but rather addressing decades of neglect.

Construction of the fish passage is not a simple dam repair and the proposal by the County is insufficient to fully analyze the direct, indirect, or cumulative impacts of the fish passage. Milwaukee County proposes to remove four gates for the fishway on river left (or the north bank) and to install a series of weirs. However, the proposal lacks any specific design details other than the location of gate removal, and no information is provided on water level or drainage impacts from the addition of the fish passage, nor any guarantee that the County would have sufficient funds for trained personnel to operate and maintain the fishway. The EIS states that the County is still working on the modeling for the fish passage, but the public will not be afforded the opportunity to review or address those impacts or potential fishery benefits as part of this EIS. Preparation of the EIS on this aspect of the repair proposal is premature and the County has not sufficiently addressed this part of the project. The DNR should require additional information before analyzing and concluding on the impacts of the fish passage.

Purpose and Need

The most important part of any EIS is the purpose and need for the project. In this instance, there is no public purpose or need for repair, other than fulfilling the DNR's Order, which could be met by either repair or abandonment. While the *Purpose and Need* section states that "the public requested the local government construct a dam to create a pool for enhancing parkland aesthetics and recreational purposes," other parts of the EIS

state that the Dam is no longer fulfilling this purpose. In addition, repairing the dam and adding fish passage is no longer central to the purpose and need to provide recreation and aesthetics. The planners of the Dam could not have foreseen the degraded aesthetics and recreation that would result from building the Dam. The impoundment and Dam degrade aesthetics, and the impoundment provides few unique public recreation opportunities that couldn't be enhanced and enjoyed by the public without the Dam. Aside from limited motorized boating, the impoundment does not provide unique or additional recreational activities than a free flowing river. Moreover, no adequate public boat launch exists in the impoundment, as mentioned in Section 12 of the EIS, in the Recreational Resources section of the *Affected Cultural Environment.*

From a content perspective, historical facts and details are missing and some of the history is incorrectly stated. This should be corrected prior to finalizing the EIS. While the EIS puts forth the history of the construction of Estabrook Dam and its long demise, it does not include relevant information on the County's failure to address several repair orders detailed in inspection reports dating back to 1995. It also fails to include information regarding the County's failure to meet several deadlines for the 2009 Repair or Abandon Order over the last seven years. In addition, as previously communicated via email, Milwaukee Riverkeeper filed a nuisance lawsuit in 2011 (not 2014) after the County failed to meet their first deadline of the 2009 Order. It is critical that this section of the EIS includes the full history of the Dam to the extent it substantiates the "need" for action, as well as the long history of the County's failure to operate and maintain the structure. Further, this is relevant given the large sums of state and federal funds being spent on this repair project with a fishway, which require financial assurance that the structures will be operated and maintained. The worst case scenario would be that the County repairs this dam, puts in a fish passage, and fails to operate or maintain it. This would result in the County and DNR facing another decision point on the Dam several years down the line. The DNR has a duty to ensure that the worst case scenario does not occur.

Alternatives

The most cost effective and efficient alternative to provide fish passage for all native fishes is complete removal of the Dam. This alternative, which was not considered, would also have no continual operation and maintenance costs. We urge the DNR to consider removal of the Dam as an alternative.

Of the dam repair alternatives considered, the only acceptable operational scenario is year round, run of the river full pool; however, that operational scenario poses significant flooding and environmental concerns. While Milwaukee Riverkeeper supports fish passage in general, spending a million dollars on a fish passage that would not function during either drawdown alternative—full winter drawdown or partial winter drawdown—makes no sense and is not a real fish passage option. Under either drawdown alternative, from September 15th to May 15th or for a full 8 months, the fish passage would not be functional, and this is a key period when there are substantial spawning runs of salmon, brown and rainbow trout, walleye, white sucker and lake sturgeon. Spending a million dollars on a fish passage to pass fish for 4 months is not a good deal for the Milwaukee River or the

taxpayer. The need and benefit for drawdowns are so limited and environmental impacts so severe that the Operational Order should dismiss seasonal drawdowns as reasonable water level management alternatives.

Dam Repair with Full Winter Drawdown
During full winter drawdown, fish would be able to pass upstream through the gates hypothetically from September 15th to May 15th. There would be no flow through the fish passage during this time, making it useless for 8 months of the year. Thus, there is no need to construct a fishway under this alternative, because the peak migratory period for native and non-native species would be met through open gates. The fishway would only possibly benefit native species whose peak migrations occur between mid-May through June when gates would be closed (e.g., white suckers and Redhorse spp.). Although the fish attracting flows tend to be on the spillover side of the Dam (river left or south bank), fish would not be able to traverse the spillway during a full winter drawdown. In addition, there are other negative and unacceptable environmental impacts from a full winter drawdown, which are discussed in more detail below and which should remove this alternative from future consideration.

Dam Repair with Partial Winter Drawdown
A partial winter drawdown results in a lower water level in the impoundment, stop logs are removed from the spillover and gates are closed all winter, which would allow no fish to swim through the gates and not enough flows to pass fish. A lower pool also makes it unlikely any fish would be able to pass over the spillover. The overall result is that there would be NO fish passage for 8 months of the year despite a million dollar investment in fish passage. This option is completely unacceptable and should be removed from future consideration. In addition, this alternative poses real safety risk to County staff that would have to access the fixed crest spillway to take out and put in stop logs in the fall and spring, which are normally times of very fast river flows and high water. This option does not comport with dam safety rules.

Dam Repair with Full Pool or Normal Water Level
Of the dam repair alternatives, the best option is a year round, full pool or "normal pool operation" with run of the river operations and no drawdown. This option provides the best chance hypothetically for fish passage 12 months out of the year and during the most important spawning months of the year. It also would minimize some environmental impacts from dam operations (e.g., erosion, scour, sedimentation and dislodging of downstream aquatic organisms).

Notwithstanding the hypothetical pros, this alternative would not address many other negative environmental impacts posed by the impoundment, including sedimentation that leads to poor habitat and water quality conditions for fish and other aquatic life like mussels. Indeed, the benefits of normal pool or full pool operation for fish would be discounted by the liabilities of increasing flooding upstream for more than the current 300 homeowners in the 100 year floodplain, and increased liability to the County should staff not be able to open gates during anything larger than a 10 year storm. There is an acknowledgement in the EIS that if the gates were closed during a flood event only

somewhat greater than a 10-year event, effects would be similar to 100 year flood elevations upstream, and that during a 100 year event with gates closed, water levels would be elevated significantly from 100 year flood elevations (from 5 inches at Bender Road to 1.5 feet at the Dam). No actual water level data or impacted number of properties is included to allow comparison of impacts of operation of the dam with 6 gates and fish passage versus 10 gates. Nor is there any comparison of repair with fish passage versus the rock ramp alternative in the County's EIR, which would also be preferable to this option. This section of the EIS also does not discuss which alternatives would require a dam operator.

All of these options pose significant concerns either with flooding, success of fish passage or other environmental and safety issues. Removal of the Dam carries none of these concerns or issues and will achieve the goals of the Department's Orders.

Manipulation of Terrestrial Resources

We would object to rock riprap over geotextile fabric for slope protection upstream and downstream of the gated dam structure. Rip rap is very painful for recreational users portaging the dam structure. There was no information provided about whether paddlers could pass through the fish passage or whether the existing take-out upstream of the dam and existing portage would be kept or improved as part of this project. Given large flows during storm events and private property on the south bank of the river, its likely paddlers will need to portage on the same side of the river as the fish passage, and this should be considered as part of the EIS. The EIS also does not mention how the County will address the existing pile of debris that has been historically removed from in front of the "dragon's teeth" or icebreakers and placed adjacent to the Dam on the north bank for nearly a decade. Also, the EIS does not include any mention of whether the past practice of removing debris from the icebreakers will still be possible under a full pool or partial seasonal drawdown scenario using past protocol and procedure that required a tracked machine to drive through the river. At a minimum, these considerations should be added to the EIS.

Manipulation of Aquatic Resources and Physical Effects

This section of the EIS mentions when and how gates would be opened to adjust water levels, but does not model water level effects from the fish passage. The impacts of the fishway to 100-year probability flood elevations have not been provided in the EIS, which begs the question of how the County's dam repair plans and Chapter 31 permits can be approved? The existing hydrologic and hydraulic model developed by SEWRPC and floodplain approved by FEMA as referenced in the EIS assume that the structure has 10 gates that will all be open during a 100-year frequency storm. This assumption does not reflect real world conditions of how the Dam can be operated. Even with the gates opened to their maximum capacity, there is more "structure" than opening, and this impacts both the capacity and conveyance of the Dam and increases flood conditions upstream for a range of flood events from the 10-year to 500 year event.

The EIS acknowledges that with all ten gates closed during a 100-year event, the river levels would be as much as 1.5 feet higher than the 100 year flood elevation near the Dam, and continue to exceed the 100 year flood elevation up to Bender Road. The EIS also acknowledges that if "6 gates are closed during a 100-year frequency flood, the 100-year flood elevations will be exceeded and can contribute to upstream flooding." Given the significant increase in flood risk to upstream homeowners and potential liability to the County, it is critical that this information be carefully considered before the DNR grant any approval of this proposed project or an operational order. DNR is required to protect public health and safety.

This is especially concerning because based on past performance, it is likely that County Staff will not be able to open all the gates (6 or 10) during a major flood event. In the past, County staff has not been able to raise gates due to mechanical gate failure, electrical problems, and/or lack of safe access to the structure. The need for dam maintenance will increase over time, not only due to the age of the 80 year old structure, but also due to increased maintenance required for the fish passage and to keep dam gates from freezing during winter months under several operational scenarios. The EIS states that either aerators or glycol systems would need to be put in place to protect against the gates freezing. Both require maintenance. Moreover, a glycol system creates unnecessary potential for harm to the public, fish, water quality and wildlife should it leak into the river. The potential for increased ice jams under the normal pool or partial drawdown scenarios is great and will cause safety issues. Given that the majority of flow will flow over the spillway, it's possible that under full pool some ice and debris could continue to flow over the spillway; however, it's unlikely that this would happen under a partial drawdown, leading to increased debris removal costs.

Any fishway design that requires frequent manipulations or major maintenance is concerning given the County's past poor performance with this structure. Further, simply requiring the County to assure that 25% of the natural flow passes through the fishway, without specific plans, is insufficient for an EIS. For example, the design appears to have multiple weirs to balance water depth and velocity through the upstream portion of the fishway to prevent any decrease in water elevation in the impoundment. This will likely require frequent flow manipulations in the fish passage, especially during the spring when the impoundment is being refilled (should any seasonal drawdown be allowed), and this also coincides with peak spring migration for fish. Placing the fishway on the north bank of the river through the gated section, far away from the dominant "fish attracting flows," which are at the other end of the dam at the fixed crest spillway, is a poor design. Even with the dam gates being opened now for nearly 8 years and given lack of a clearly defined thalweg in this portion of the channel, the dominant flow of the river is along the south bank adjacent to the spillway. This raises concerns about whether the County will be able to ensure that 25% of the river flows will go through that fish passage, regardless of operational scenario.

Affected Biological Community and Biological Effects

Repair of the dam with any operational scenario would cause continued sedimentation to build up in the impoundment, degrading water quality and habitat, and leading to a carp dominated system. The best alternative to reduce sedimentation, protect aquatic life, provide fish passage, and improve water quality is complete dam removal, which was not considered.

Either dam repair drawdown alternative would flush sediment downstream when gates are open, causing sediment to be deposited in the streambed, leading to loss of mussel habitat and increased sediment clogging of mussel siphons and gils. Keeping dam gates permanently closed in a full pool or normal operation scenario, would lead to continued sediment deposition behind the impoundment causing its habitat value and water quality to be degraded for mussels, fish, and other life. The impoundment also causes higher water temperatures and decreased oxygen levels that minimize value to aquatic life and result in nuisance algae blooms in the summer, which further degrade water quality. Mussels in shallow water can be exposed to hypoxia from algae as well as to ammonia from decaying organic material. Likewise, suddenly closing the gates in spring to raise the impoundment water level under a full or partial winter drawdown, would lower water levels downstream causing desiccation of mussels and other aquatic life downstream of the Dam.

Similarly, sudden release of water through dam gates in the fall as the impoundment is lowered has been shown in the past to cause erosion and scour downstream. In addition, a large discharge of flow or a discharge during the wrong season can dislodge organisms downstream and upstream of the dam causing death or stress to mussels, juvenile fish, macroinvertebrates, and other aquatic life. Any of the drawdown alternatives is troubling from this regard, but there are also likely impacts under a full pool or normal water level condition, as the County would still be allowed to operate the gates during flooding conditions. In addition, lowering of water levels can cause mussels and other organisms to be left high and dry, stranding them, drying them out and making them more vulnerable to predation. We have seen evidence also of death of frogs and other amphibians from past dam operations, by both drying out and freezing. Likewise, dropping water levels can kill wetland plants that become dewatered as a result of drawdown. All drawdown scenarios are bad for mussels and aquatic life. While a partial drawdown could provide more water in the impoundment during winter, which would benefit mussel populations, this is outweighed by restriction of movement of fish, which are also hosts required for mussel reproduction. Full drawdown would allow fish passage, but also cause more mussel injury and death through sedimentation and desiccation. Thus, full pool would be the most protective operational scenario, especially for mussels and other aquatic life. The most protective alternative for mussels would be complete dam removal, which would provide the best water quality, best conditions for mussel growth and survival, and best likelihood of passage of fish hosts.

Opening and closing of gates and resulting changes in water level makes it impossible for vegetation to become established on streambanks under any dam repair scenario. This

subsequently leads to increased sediment transport from erosion, and resulting impacts on fish and aquatic life both upstream and downstream of the dam.

Despite a laundry list of sensitive fish, mussel, macroinvertebrate and other plant and animal life detailed in the *Affected Biological Environment* section, there was no mention under different operational scenarios whether or not there could be greater biological effects to certain species of concern under different operational scenarios. For example, it would be helpful to know whether certain species such as redhorse, sturgeon, the striped shiner, and others would be able to use the fish passage if properly designed given expected flow and water depths.

A discharge from the dam that is too low—either due to a partial winter drawdown or a drought, making the fish passage un-operational during a full pool scenario—could cause significant impacts to fish, mussels, and other life downstream. Mussels, invertebrates, and other aquatic life move very slowly, and would not be able to adapt to rapid changes in impoundment water levels. Given the climate change predictions of more frequent and volatile storms, punctuated by drought, it is questionable whether this Dam can be operated in any way to minimize negative impacts on fish and aquatic life while simultaneously protecting upstream landowners from flooding. Dam repair is a lose-lose scenario, the only benefit of which is to provide a limited number of private landowners with a few months of a "lake" for their pontoon boats.

Affected Cultural Environment and Cultural Effects

The dam repair option that also minimizes impacts to the environment is the full pool or normal water level operation. Dam repair provides only a minimal increase in recreational value for the general public. The impoundment is unlikely to attract many motor boaters that do not live in the impoundment given the lack of actual stream miles that can be traversed at wake or no-wake speeds, which range from approximately 0.2 miles to 1 mile for wake speeds based on type of craft, and a max of 2 miles for no-wake motorized boating under best case flow conditions.

Dam repair, under any operational scenario, would cause increasing sedimentation over time in the impoundment, which ultimately is the key factor limiting the quality of fisheries, habitat, and water quality. Increasing sediment build up over time will affect recreation of all kinds, but most importantly, the ability to use motorized boats. Motorized boating would not be possible for 8 months of the year under either drawdown scenario; the season could be extended a few months potentially under a full pool scenario unless more flows need to be diverted to maintain 25% flow in the fish passage. None of these considerations are included in the EIS and should be assessed and included.

In addition, sediment build up in the impoundment under any repair scenario would require costly dredging to maintain and facilitate continued recreation by motor boats. On the flipside, while dam removal would result in no motorized boating of any kind, the benefits outweigh this impact, including: improvement in habitat, fisheries, and water quality; reduction in nuisance algae and eutrophic conditions contributing to impairments

in the Milwaukee River Area of Concern; improvement in conditions for other recreational activities such as paddling and fishing; and improvement in aesthetics. Dam repair is not needed to facilitate public recreation 12 months of the year to Lincoln and Estabrook Parks.

The EIS did not, but needs to include consideration of nuisance trash, how it would be removed under different operational scenarios, how often it would be disposed of, and impacts related thereto, including costs. Debris removal is made more complicated by repair scenarios that increase water levels during winter months (e.g., full pool, partial drawdown), making it difficult if not impossible to remove trash and debris from behind the icebreakers due to high water. In addition, a partial or full winter drawdown would ensure continued accumulation of debris behind the fixed crest spillway. The County's reliance on past expenditures for debris removal is not an accurate representation of future needs should this dam be repaired.

Furthermore, not only does trash contribute to the aesthetic impairment of the Milwaukee River Area of Concern, it is also bad for wildlife and inhibits recreation such as paddling. In the past, paddlers have had to portage the icebreakers due to trash accumulation and this is likely to continue with or without a fish passage.

Socioeconomic Effects

The Socioeconomic effects section, which is three sentences long, states that DNR does not anticipate any impacts to homeowners from repair of the dam due to reestablishment of water levels, and states there could be increased fishing from the fish passage. Again, this intimates that dam removal would cause impacts to property values, which has no factual basis. Over the last 8 years, homes have continued to sell in the impoundment, and thus claims that there would be $200 million plus in lost property value should the dam be removed are unfounded. We have not seen one report of property value decline from a small dam removal in Wisconsin or elsewhere. Conversely, past studies of property value impacts from small dam removal in Wisconsin have shown that property values tend to stay the same or improve after dam removal (Provencher et al, 2008).

Socioeconomic effects did not consider the negative effects from potential upstream flooding should the County not get all gates open in any storm exceeding a 15-year event. Given the new SEWRPC study on the hydrological and hydraulic effects of the Dam, the County would be liable under any repair scenario for upstream flooding should they not get gates open in time. There would also likely be negative effects from poor water quality and increased growth of nuisance algae, both of which are likely unavoidable in the short-term. This could impact recreation and house sales should the dam be repaired.

Short and Long-Term Environmental Effects and Cumulative Impacts

The short and long-term environmental effects and cumulative impacts were not sufficiently analyzed and the DNR must prepare a more thorough review. For example, long term environmental effects of Dam repair with fish passage did not adequately include negative effects from the continued existence of the impoundment and increased

sedimentation over time to habitat, water quality, or aquatic life as previously described. There was some discussion of increased risk of ice damage under a normal pool, but no other discussion of ice impacts under other scenarios. It is important to note that even with the gates open over the last 8 years, there continues to be ice damming upstream, especially in the big bends of the river. These sections did not consider nuisance trash or the County's failure to remove trash accumulation from past dam maintenance as mentioned above.

The cumulative impacts section states there are no such impacts from dam repair under any operational scenario. For example, over time, any repair option will have cumulative impacts on sediment deposition, and this would likely require future dredging for navigation and/or of contaminated sediments from upstream Superfund sites such as Cedar Creek. Likewise, over time, constant flushing of sediment downstream from dam operations is likely to degrade downstream habitats and affect aquatic life such as mussels and macroinvertebrates. This section is completely deficient.

Risk and Precedent

This section of the EIS intimates that there is a risk that repair with fish passage could enhance movement of aquatic invasive species. This conflicts with other statements in the EIS (*Affected Biological Environment* section) where the Department concludes that the dam is not a barrier to aquatic invasive species. Furthermore, no evidence supports that supposition either. The real risks include: that the fish passage would not operate as intended given changes in flow regimes or lack of maintenance by Milwaukee County; the increased flood risk to upstream homeowners under different operational scenarios; and the significant risk to downstream paddlers and fishermen every time the gates are opened suddenly during a storm event. Downstream paddlers and fishermen are often unaware when the gates are opened during storms, which put them directly in harm's way.

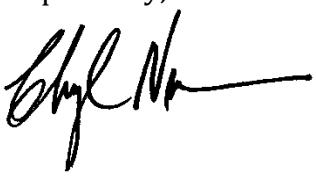
In the Risk and Precedent section, there should also be some analysis of the County's wherewithal, or lack thereof, to hire a dam operator or to operate and maintain this dam over time. There is no "fund" to pay for future operations and maintenance, except for a statement that $51,000 per year will be allocated for this purpose from television and radio antenna rental fees paid to the County for the towers across from Estabrook Park. No financial assurance bond has been provided and no trust account created. Further, that leaves a nearly $110,000 per year shortfall. State law requires that a dam owner prove that it can finance a dam for 10 years which the County has not done.

Lastly, the EIS mentions that there is a good precedent for the Estabrook fishway that was set by the fish passage on the Milwaukee River in Thiensville. Thiensville's fishway was developed as a nature-like fishway with little need for water level manipulation and no mechanical or moving parts. Allowing Milwaukee County repair this dam given its past performance and its inability to meet any deadline to repair the structure going back to 1995, and extending to the 2009 Repair or Abandon Order, sets a negative precedent and one that cannot be ignored.

Limiting the Department's role to only looking at Milwaukee County's preferred option sets a negative precedent for Wisconsin given that there are around 3,900 dams left in Wisconsin, many of which are old and failing. If we truly want to improve water quality, clean up our Milwaukee River Area of Concern, minimize flood risk, and set ourselves up to be more resilient for a changing climate, then we need to question the "repair" or major rebuilding of dams that provide no public benefit. The DNR is charged with the duty and authority to first and foremost protect the public trust and public interest in our shared waters. The DNR's preliminary decision to let the County repair and operate Estabrook Dam given the significant negative environmental effects and risks to public safety laid out in the EIS sets a negative precedent for Wisconsin. We encourage you to update the EIS to include the points raised herein and more importantly, to revise the EIS to include a consideration of all alternatives and impacts of dam removal as required by state and federal law.

Thank you for your consideration of these comments. If you have any questions, please do not hesitate to contact us at (414) 287-0207 or at cheryl_nenn@milwaukeeriverkeeper.org.

Respectfully,



Cheryl Nenn
Riverkeeper

Kevin L. Shafer, P.E.
Executive Director

March 23, 2016

Kristina Betzhold
Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, WI 53212

Subject: Estabrook Dam Rehabilitation and Operation Draft Environmental Impact Statement

Dear Ms Betzhold:

One of the missions of the Milwaukee Metropolitan Sewerage District (District) is to reduce flood risks in its tributary communities. Flooding directly causes property damage, economic losses, and adverse health effects. In addition, when structures are flooded, inflow into the sewerage system increases operating costs and causes overflows. From this perspective, the District has reviewed the draft environmental impact statement for the Estabrook Dam Rehabilitation and Operation (dEIS).

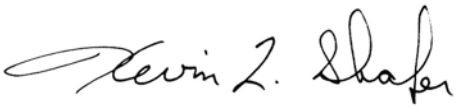
The dEIS is limited to three approaches to operating a repaired dam: (1) gates closed, (2) full winter drawdown, and (3) partial winter drawdown. The dEIS fails to provide sufficient information to compare flood risks among the different options. The dEIS should identify the number of structures in the 100-year floodplain and the typical depth of flooding for structures in both Glendale and Milwaukee. To allow a complete understanding of how the dam affects flooding, the dEIS should show flood elevations, number of affected structures, and depth of flooding for gates open, gates closed, and dam removed.

Generally, I am disappointed by the narrow scope of the dEIS. This project has much public interest and deserves a thorough analysis. The District's Commission adopted a resolution in May 2015 (enclosed) supporting removal of the dam because removal would support the District's efforts to reduce flood risks, while also improving habitat, water quality, and sediment quality. Furthermore, removal would have no continuing operation and maintenance costs. The public would benefit from a detailed analysis of the complete range of options; therefore, please consider extending the scope of the dEIS to include additional options, including removal.

If you have questions, please contact Tom Chapman from my staff at tchapman@mmsd.com or 414.225.2154. Thanks for your attention to these comments.

milwaukee metropolitan sewerage district
260 W. Seeboth Street, Milwaukee, WI 53204-1446
414-225-2088 ● email: KShafer@mmsd.com ● www.mmsd.com

Sincerely,



Kevin L. Shafer, P.E.
Executive Director
Milwaukee Metropolitan Sewerage District

Encl.: MMSD Commission Resolution – Support for Removal of the Estabrook Dam (May 18, 2015)

Milwaukee Metropolitan Sewerage District

Certified Copy

260 West Seeboth Street
Milwaukee, WI 53204

Resolution: 15-053-5

File Number: 15-053-5

Commission Support for Removal of the Estabrook Dam

WHEREAS, removal of the Estabrook Dam will reduce flood elevations in the Milwaukee River upstream of the Estabrook Dam; and

WHEREAS, a reduction of flood elevations supports the District's goal of removing structures from the 100-year (1% probability event) floodplain; and

WHEREAS, removal of the Estabrook Dam will improve water quality, habitat, fish passage, and river aesthetics and reduce sediment accumulation.

NOW, THEREFORE, BE IT RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the Commission supports the removal of the Estabrook Dam as soon as practicable.

I, Anna Kettlewell, Commission Secretary of the Milwaukee Metropolitan Sewerage District, do hereby certify that the above is a true and correct copy of Resolution No. 15-053-5, adopted by the Milwaukee Metropolitan Sewerage Commission at a meeting held on 5/18/2015.

Anna Kettlewell

Anna Kettlewell, Commission Secretary

5-18-15

Date Certified

Dick A. Yahr
5270 N Milwaukee River
Milwaukee, WI 53209-5140

Kristina Betzold

WDNR, 2300 N. Martin Luther Dr.,

Milwaukee, Wisconsin, 53212

Dear Kristina,

What an extremely well run public meeting on 3/22/16. Also, Mr. Ron Thompson, you were absolutely masterful in a very difficult circumstance. Hopefully my notes will provide some expansive insights for you, Kristina and co workers.

In brief summary, I request that the Department:

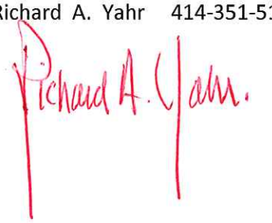
1.) Reject: the "gates closed, full pond, year round " option and Suggest and Endorse: the "full winter drawdown with fish passage". This, for reasons written in RED on the enclosed.

2.) Write In: more flexible language re the " 6" water elevation drops " and "maintaining a minimal flow at ALL times".

3.) Does not ignore the WDNR's responsibility to protect the Public from "unintended consequences" which may occur due to any changes in the past, tried and proven best operational practices re transport of contaminated river bottom soils. Since initiatives for more dam removals on this most heavily populated river are in the works, I suggest an entire Watershed approach and that attention to effects upon near shore Lake Michigan waters be taken . Analysis of quantity and quality of soils upstream to include all roadway and non point source pollutants....not just PCB's and PAH's.... will reveal the presence of phosphorus, lead, chromium, copper, cadmium, zinc, manganese , arsenic, nickel....hexavalent chromium....and more... all environmental pollutants which may be washed downstream by increased stream velocities whenever a dam is removed or established protocols are abandoned.

4.) For 18 years I've loved to canoe around the various possible routes and islands here in Lincoln Park... often 7X/week. In the last 7 years, I've canoed 4X. I want it back.. and therefore the enclosed.

Richard A. Yahr 414-351-5142



Possible ISSUES FYI

RE: ESTABROOK DAM
Milwaukee, Wisconsin

There is something so wonderful – so of PEACE in our increasingly stressed-out urban lives – in taking an evening canoe ride – feeling the vibration absorptive qualities of water dissolve our discordant, clamoring urgencies, and paddle a few miles, perhaps with a delicious picnic lunch…for about 72 years Milwaukee's people have accepted these joys as a given. Today, an intelligent and patient group conspires to take this away from Milwaukeans. A long series of public meetings and public debates have explored multilevel pros and cons of this issue resulting in votes of 16-3, 17-0, and 17-0 in support of keeping this dam.

Milwaukee, Wisconsin 53212
TELEFAX NO. 414-263-8483

March 21, 1991

IN REPLY REFER TO: 3200

KRISTINA & RON
RY file
ORIG.
Included for your investigative review of History of WDNR and insufficient foresight by Dam Removal advocates — R.

The Honorable John O. Norquist
City of Milwaukee
City Hall
200 East Wells Street
Milwaukee, Wisconsin 53202

Dear Mayor ~~Norquist~~ John;

On December 14, 1990 the City of Milwaukee completed the drawdown of the North Avenue impoundment for the installation of a new watermain across the Milwaukee River, and demolition of the North Avenue bridge. The City anticipated that the gates to the dam would be closed and the impoundment refilled during April of 1991. I am writing to request that the City maintain the drawdown of the North Avenue impoundment to allow completion of the feasibility study on the impacts of dam maintenance and potential removal.

My staff sampled water and sediment quality during and after the impoundment drawdown. Based on those results, we strongly suggest that the City of Milwaukee maintain the drawdown of the North Avenue impoundment until completion of the feasibility study. By keeping the impoundment down, we eliminate environmental impacts should a future drawdown be needed, facilitate the study, and mitigate environmental impacts associated with refilling the impoundment. The fact sheet which documents and supports our request to extend the drawdown is attached.

Since no minimum surface water elevation has ever been set for this dam, the City has the authority to leave the impoundment drawn down after April 1. If the City agrees to extend the impoundment drawdown, the Department will work to provide the services necessary to establish a vegetated cover crop for the exposed mudflat areas.

Should the City decide to continue the drawdown of the North Avenue impoundment, I recommend our staffs meet to discuss remaining issues. If you or your staff have any questions, please contact Will Wawrzyn at 263-8699.

Sincerely,

Gloria McCutcheon
District Director

Please observe the MYOPIA in what is about to be proposed.
R.4

Attachments

c. C. D. Besadny - AD/5
David Schulz - Milwaukee County

FACT SHEET FOR THE NORTH AVENUE DAM EXTENDED DRAWDOWN

The Department of Natural Resources would like to reach a joint agreement with the City of Milwaukee to continue the current drawdown of the North Avenue impoundment on the Milwaukee River. The impoundment should remain drawndown until such time that a feasibility study is completed which addresses relevant management alternatives for the impoundment. The study and report are expected to take 18 to 24 months once fully initiated.

The Department bases this decision on their need to;

1. Complete field surveys for the North Avenue dam removal feasibility study,
2. To reduce environmental impacts associated with another future drawdown should a decision be made to remove the dam and,
3. To mitigate environmental impacts associated with refilling the impoundment.

The Department has proposed to complete a variety of field surveys during the impoundment drawdown. These surveys include surface water quality and sediment sampling and analyses, channel and floodplain mapping, dam inspection, fish and wildlife habitat surveys. This information is critical for answering technical issues previously identified for the feasibility study. Overall costs for the feasibility study will be reduced by completing the surveys during drawdown. While it was the Departments intention to complete these surveys by April 1, 1991, time constraints, unsafe ice conditions, and high stream flows have prevented their completion.

Based on water quality sampling conducted during the December, 1990 drawdown, potential environmental impacts were of such a magnitude so as not to pursue another temporary or permanent drawdown in the future. An estimated 3,000 tons of sediment washed downstream of the North Avenue dam. In addition, state water quality standards may have been exceeded for chromium, copper, zinc, arsenic, cadmium, lead, and PCBs. The Department will continue to monitor water quality during the drawdown period.

An extended drawdown would mitigate release of sediment bound pollutants back into the water column under impounded conditions. Sediment in the North Avenue impoundment has previously been classified according to USEPA guidelines as "moderately" to "heavily" polluted. Refilling the impoundment may result in violations of state water quality standards for PCBs, and continued violations of state water quality standards for dissolved oxygen.

Extending the drawdown is expected to mitigate the dissolved oxygen problems by reducing the retention time and habitat

"A"

Based on NR 105 water quality criteria, the following pollutants may have exceeded state water quality standards as a result of the drawdown;

Acute Toxicity Criteria
Water quality exceedances for hexevalent chromium.
Water quality exceedances for copper.
Water quality exceedances for zinc.
Water quality exceedances for aluminum.

Chronic Toxicity Criteria
Water quality exceedances for arsenic.
Water quality exceedances for cadmium.
Water quality exceedances for hexevalent chromium.
Water quality exceedances for copper.
Water quality exceedances for lead.
Water quality exceedances for zinc.

Wild and Domestic Animal Criteria
Water quality exceedances for PCBs.

Human Threshold Criteria
Water quality exceedances for cadmium.
Water quality exceedances for thallium.

Human Cancer Criteria
Water quality exceedances for arsenic.
Water quality exceedances for beryllium.
Water quality exceedances for PCBs.

Approximately 3,056 tons of sediment (283 cu yds) were discharged through the dam between 12/14/90 and 12/19/90. This estimate is based on the instantaneous loading differences observed between the Capitol Dr. and Humboldt Ave. sample sites. Loadings associated with CSO events are not factored in the estimates. Water quality results and trends for suspended solids at sample sites located further downstream in the estuary indicate the appreciable quantities of sediment and other pollutants were deposited along the lower reaches of the Milwaukee River channel.

Based on visual observations for turbidity, water quality at the dam has improved appreciably. We have not received the January, 1991 sample results to confirm our observations.

Net losses of other pollutants discharged through the dam were also estimated for the period of record. The results are listed below;

Parameter	lbs	
BOD5	208,959	
VSS	752,110	
Al	88,819	
As	1,616	
B	-39	**
Ag	<20	*
Ba	1,013	
Be	8	
Cd	18	
Co	19	
Cr	462	
Cu	640	
Li	-8	**
Mn	3,610	
Mo	78	
Ni	148	
P	8,934	
Pb	586	
Sb	343	
Se	<176	*
Sn	211	
Sr	2,308	
Tl	592	
V	157	
Zn	1,926	

* Analytical results less than laboratory detection limits.
** Net loadings greater at upstream control sample site.

The Department will continue to monitor water quality during the extended drawdown period.

3. Environmental Impacts Associated with Refilling the North Avenue Impoundment

A. A sediment pollution classification system has previously been developed by USEPA Region 5, and is based on the content of nutrients, heavy metals, PCBs, etc. Based on these criteria, the sediments contained within the North Ave. impoundment would be classified as "heavily polluted" by lead, copper, cadmium, zinc, manganese, arsenic, phosphorus, barium, and chromium, "moderately polluted" by nickel, and "polluted" by PCBs. The quality of sediment within the impoundment is similar to sediment present in the Milwaukee River portion of the Harbor Estuary.

An extended drawdown would mitigate release of potential sediment toxics back into the water column and biota. Approximately 70-80% or more of the exposed mud flats would no longer be in continuous and direct contact with surface waters and biota should the drawdown be extended.

POLLUTION CONVEYED / SLUICED INTO LAKE MICHIGAN BY OPENING + REMOVAL of NORTH AVE DAM 1990-1997 — 400,000 TONS OF WHAT?

p 2a WDNR DOCUMENT "FACT SHEET" 3/27/1991 Attached.

Parameter	lbs		WDNR DATA X 130	WDNR DATA X 1286
BOD5	208,959			
VSS	752,110			
Al	88,819	Aluminum		
As*	1,616	Arsenic	210,080#	
B	-39	** Boron		
Ag	<20	* Silver		
Ba*	1,013	Barium *	131,690#	
Be	8	Beryllium		
Cd*	18	CADMIUM *	2,340#	
Co	19	COBALT		
Cr*	462	Chromium *	60,000#	
Cu*	640	Copper		
Li	-8	** LITHIUM		
Mn*	3,610	Manganese		
Mo	78	Molybdenum		
Ni	148	Nickel		
P	8,934	Phosphorus *	1,161,420#	(11,481,124
Pb*	586	LEAD		
Sb	343	Antimony		
Se	<176	* selenium		
Sn	211	TIN		
Sr	2,308	STRONTIUM		
Tl	592	THALLIUM		
V	157	VANADIUM		
Zn*	1,926	ZINC		

(UNCORRECTED ERROR IN METHOD DNR USED — tested only suspended solids for 6 days!)

IF WDNR est. is 3056 tons (283 yd³ sic?) + ACTUAL TRANSPORT => 400K tons THEN ACTUAL LOADING FOR These SHOULD BE 130X

IF the 283 yd³ Figure + ACTUAL LOAD IS 1286 X IF 3056 tons were enclosed in 283 yd³, The amount OF PHOS. DUMPED would BE ASTRONOMICAL!

Therefore, let us reasonably take the low # (130X)

*These 4 selected as Most Dangerous in "Heavily polluted" category.

* Analytical results less than laboratory detection limits.
** Net loadings greater at upstream control sample site.

The Department will continue to monitor water quality during the extended drawdown period.

3. Environmental Impacts Associated with Refilling the North Avenue Impoundment

A. A sediment pollution classification system has previously been developed by USEPA Region 5, and is based on the content of nutrients, heavy metals, PCBs, etc. Based on these criteria, the sediments contained within the North Ave. impoundment would be classified as "heavily polluted" by lead, copper, cadmium, zinc, manganese, arsenic, phosphorus, barium, and chromium, "moderately polluted" by nickel, and "polluted" by PCBs. The quality of sediment within the impoundment is similar to sediment present in the Milwaukee River portion of the Harbor Estuary.

An extended drawdown would mitigate release of potential sediment toxics back into the water column and biota. Approximately 70-80% or more of the exposed mud flats would no longer be in continuous and direct contact with surface waters and biota should the drawdown be extended.

"SLOW DOWN" DOWNSTREAM RIVER

PLEASE OBSERVE THE MYOPIA.... In what is about to be proposed....

Jan 18, 2016
ORIG

1. ***dick yahr*** **says:**

   January 18, 2016 at 7:57 pm

   I regret that I disagree with the author that the removal of the North Ave Dam. was environmentally beneficial. Further, I suggest analysis of actual sediment transport which occurred will demonstrate that the North Ave. Dam removal effected the greatest ECOLOGICAL and ECONOMIC catastrophe in the history of SE Wisconsin since the 1875 typhoid epidemic. The method used by the WDNR to calculate the transport of highly contaminated and definitely cancer correlated river bottom soils produced an estimate of 3156 tons (ref Mar 21, 1991 WDNR letter to Milwaukee Mayor John Norquist) . The corrected theoretical calculations sent to the WDNR recently show over 419,000 tons were actually dumped into our estuary and our drinking water supplies in Lake Michigan . The hypothesis that this transport almost certainly caused the March 31,1993 cryptosporidium epidemic and the subsequent cladophera / e-coli algae blooms which virtually eliminated use of our Lake Michigan swimming beaches can now be evaluated by simply duplicating the Sediment Transport Section of the Woodward Clyde Study of 1994. If the 419,000 ton figure is correct, the taxpayers serviced by the Milwaukee Water Dept. have paid over $340 Million to redo the Texas Ave water intake and the Howard Ave Water Treatment Plant , plus an estimated $50 Million in legal costs for the crypto lawsuits, plus the collateral damages of loss of use of our beaches , plus the seasonal stench on near shore areas due to rotting algae , not to include the human misery caused to 400,000 people who lost wages, health and in over 54 cases, their lives. Such allegations I believe are significant enough to justify an investigation of the facts and a re evaluation by all of us regarding a history of insufficient foresight by dam removal advocates in this state.

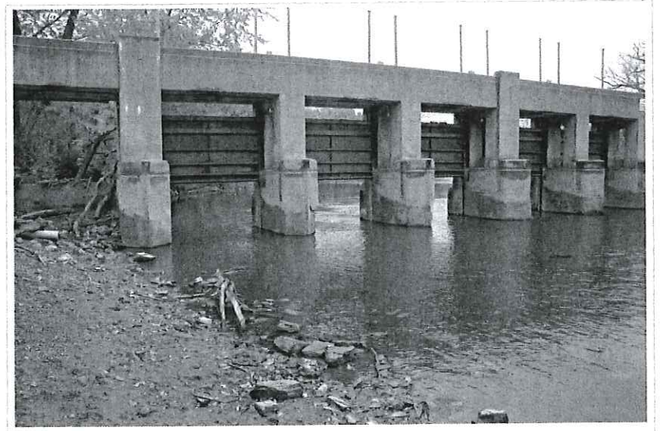
DRAFT COMMENTARIES 3.22.16
ON WILL WAWRZYN'S ARTICLE

OP-ED

Don't Repair the Estabrook Dam

Taking issue with Urban Milwaukee's series. First of two parts.

By Will Wawrzyn - Mar 15th, 2016 10:42 am



Estabrook Dam

Removing the Milwaukee River Estabrook Dam is the most cost-effective and environmentally sound dam management alternative. That was the conclusion Milwaukee County's

consultant AECOM came to in a detailed 2015 environmental assessment. AECOM's comprehensive assessment studied the socio-economic and environmental benefits and costs associated with repairing or removing the dam, and a number of other alternatives that were developed as potential compromises to accommodate the concerns of dam repair and removal proponents. Several public meetings were held over the last few years, and the public weighed in with support for dam removal. In addition, the cities of Milwaukee and Shorewood and the Milwaukee Metropolitan Sewerage District (MMSD) have all passed resolutions in support of dam removal.

It is unfortunate that Supervisor **Theodore Lipscomb, Sr.**, who was present at early meetings for the County's own expert assessment and had ample opportunity to review the assessment, failed to offer it to the full County Board for review and debate after public hearings in 2014 and after the draft environmental assessment was issued in summer 2015. In fact there has never been a standalone up or down vote at the Milwaukee County Board level based on the independent merits of this issue. This simple act could have avoided the political gamesmanship that followed, where the County's policy was changed from repair, to removal, and then back to repair with fish passage through several budget cycles in 2014-2016 using questionable methods.

Some of the information cited by **David Holmes** from the draft September 2014 Environmental Assessment (EA) is outdated (e.g., dam management costs). Unfortunately, even the most recent EA must go through yet another revision because of the County Board's change in policy to add fish passage to the repair of the dam, and to comply with the DNR's requirement to establish an Operational Order for operating and maintaining the dam and fishway, and setting water levels that are protective of the public interest and the environment. A Public Hearing is tentatively planned in March 2016. I encourage all interested residents to follow and participate in the process and review the most recent October 2015 environmental assessment.

Milwaukee County's current policy to repair the Milwaukee River's Estabrook Dam and to construct an engineered fish

Press Releases

Bucks Release New Arena Renderings Ahead of Design Submission to City by Milwaukee Bucks

Rep. Wachs to GOP U.S. Senators: Do Your Job! by Dana Wachs

U.S. Senator Tammy Baldwin Statement on President Obama's Nomination of Judge Merrick Garland to the United States Supreme Court by Tammy Baldwin

Read more Press Releases

passage facility around it should be **postponed**. The County should appoint an ad hoc committee of scientists and other independent professionals to review the existing information and provide recommendations that benefit the entire stakeholder group. Scientists and engineers from local universities and colleges, and water resource management agencies with expertise in surface water resource studies and management should be asked to participate on the committee. An alternative can be identified that mitigates the severe historical environmental impacts of deepening and widening of the river channel for 1.5 miles and the construction and operation of the Estabrook Dam. Unlike the dam repair with fish passage alternative, there are alternatives that are less costly, more sustainable, approach the historic functions and uses of the Milwaukee River, and do not increase potential flood and drainage damages. As in the past, the findings and recommendations should be presented to the public for review and input. Supervisor Lipscomb, as well as proponents and opponents to repairing the dam, should accept those recommendations as expertly informed and follow them without political maneuvering. What could be more responsible than that? After all is said and done, the ultimate decision on the fate of the Estabrook Dam will affect existing and future generations and will dramatically influence hundreds of square miles within the Milwaukee River and Lake Michigan Basins, an area dwarfing the confines of the 103-acre impoundment. It's important the County and its residents make that decision based on the best information available.

While I found the series by Mr. Holmes describing the geology and history of modifications to the Milwaukee River in Lincoln and Estabrook Parks, and his technical arguments in support for dam repair

and construction of a fish passage facility (fishway) interesting, I need to respond to many of Mr. Holmes' claims that the technical information offered by proponents for other dam management alternatives including dam removal are *"…unsubstantiated by either actual data collected from this section of the Milwaukee River or by data collected from comparable rivers and dam removal projects".*

That said, here is some of my relevant background. I am a former water resources and fisheries biologist with the Wisconsin Department of Natural Resources (DNR) having retired in July 2015 after 38 years with the agency. My experience as it relates to the Estabrook Dam included working with over 15 dam owners and stakeholders to assess dam management alternatives in the Milwaukee River Basin, the pre- and post-monitoring of those projects, as well as assisting with the design of fish passage features including the fishways at the Mequon-Thiensville Dam on the Milwaukee River and several projects along the Menomonee River. I was also the local DNR project manager for the $4.7 million North Avenue Dam removal completed by the City of Milwaukee in 1997, and was also involved with the initial assessment that identified the extent of sediment accumulation and PCB contamination in the Milwaukee River's Estabrook Dam impoundment. I am a long-time, taxpaying resident of Milwaukee County and deeply care for what is best for the long-term uses and values of the Milwaukee River.

The following is a very brief summary of a longer and more in-depth analysis with exhibits and links regarding the future state of the Estabrook Dam and impoundment, which can be found here. I would appreciate your review of the larger document and offer your comments by way of this article.

What was the Milwaukee River's historic morphology? Drainage Lake or River?

Mr. Holmes and supporters for repair of the dam argue that keeping the Estabrook Dam restores the *"…unique hydrologic feature – a drainage lake that appears to have existed in the area of Lincoln Park since before the end of*

Be the first of your friends to like this

Recent Comments

Kurt on **Bucks Release New Arena Renderings Ahead of Design Submission to City**

Bill Sweeney on **Data Wonk: Caperton Rule Could Kill John Doe Decision**

John Casper on **Rebecca Bradley's Last 48 Hours Have Been Spin Not Substance**

Tony B. on **Duel Over the Domes**

Kerri on **New Milwaukee Restaurant and Rooftop Bar & Lounge Opening this June**

the Wisconsin glaciation." Firstly, the historic river morphology that surrounded the area is not unique to the Milwaukee River watershed. There are numerous examples of similar river reaches in Milwaukee, Ozaukee and Washington Counties, some have been altered and others remain in a relatively natural state. Secondly, by many abiotic or biotic measures, the pre-European settlement of the Milwaukee River surrounding the Estabrook Dam and its impoundment was riverine and supported river ecological functions and values. This is borne out by Milwaukee County's GIS-based 1937 aerial photographs that were taken while half of the river channel modifications downstream of Hampton Ave. were still under construction, and prior to constructing the dam and the river "center-cut" upstream of Hampton Ave., as well as from historic planning documents.

A 1937 photo is "not quite early enough" your claim is false.

Prior to the 1930's lowering of the rock outcrop and construction of the 0.4 mile long "center cut" between Hampton Avenue and the upper confluence of the present day "east and west oxbows", the Milwaukee River was a low-gradient, meandering alluvial river channel dominated by pool and run features. Its immediate corridor and broad floodplain included over 100-acres of floodplain wetlands that supported habitat for a diverse plant and animal community sustained by seasonal flood waters that deposited nutrient-laden sediment. The top of the bank was reported to be only 2-feet from the normal (base-flow) water surface suggesting the entire river valley was inundated during frequent floods. The flood waters likely extended upstream into additional wetlands along "Mud Creek" (present day Lincoln Creek).

yes! "drainage lake"

yes! A periodic lake upon which even canoes could navigate... but not like what we have been left with since the dam gates were left open?

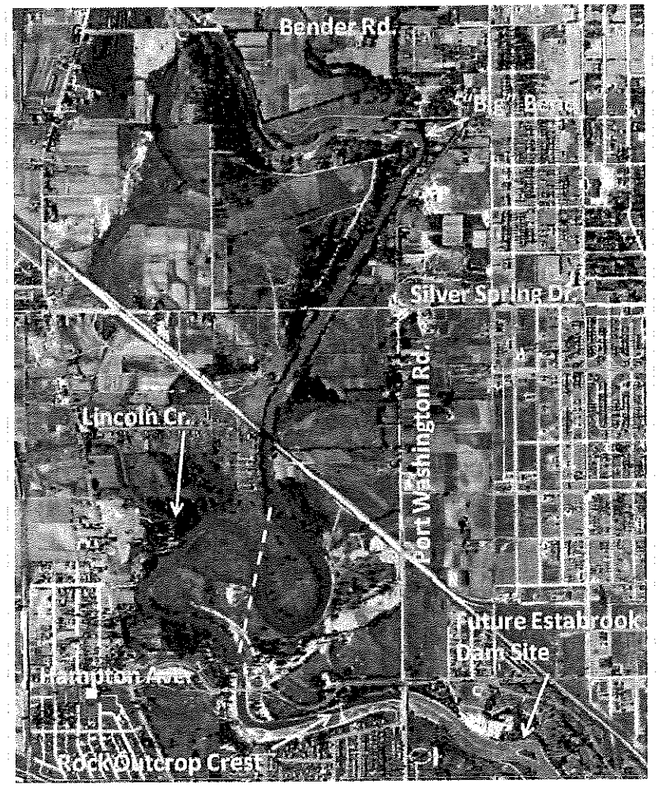
New Faces

MCW names Chief Historian and Senior Associate Vice President for Communications

Medical Society of Milwaukee County Announces DR. Brian Peterson as Board President

Wisconsin Center for Investigative Journalism hires National Geographic editor to lead digital, multimedia work

More New Faces



1937 aerial photograph showing historic meander of the Milwaukee River in Lincoln Park prior to construction of the Estabrook Dam and 3,000-ft long by 200-ft wide "center-cut" (yellow dashed line). Widening and deepening of the river channel and rock outcrop is completed upstream of future dam site to the temporary cofferdam just upstream of Hampton Ave. bridge. Planning documents stated the rock outcrop backwater effect extended 3 miles upstream which coincides with the "big bend". Source: Milwaukee County Interactive GIS Mapping website.

All rivers transport water and sediment. The physical, chemical and biological functions of a river's ecosystem depend on this process. Unlike a "drainage lake", a river's flow of water, its sediment and its nutrients is unidirectional and because the water is flowing, the river is undergoing continuous physical change. The retention time of the water, sediment and nutrients at any point along the river during channel forming flow events is on the order of minutes, whereas a drainage lake's retention time is much longer depending on its in flow and volume. A river's stable channel

The Bed Rock outcropping from the Dam upstream just south of Hampton Ave would form such a barrier it would seem to me! Your analysis lacks a VERTICAL COMPONENT.

plan form (e.g., meanders) and other dimensions (e.g., depth, width), and its floodplain, is dependent on the balance between the supply of water and sediment that is transported during flood events that typically occur every one to two years. Compared to drainage lakes, rivers have a high degree of plant, animal and habitat diversity. **Modify its morphology by excavating a deeper and wider channel; flatten its slope, and increase the rate of sediment accumulation by constructing a dam and everything changes for the worse.**

Supervisor Lipscomb stated that the dam "…*re-establishes the historical* ***water level*** *in the area because it was built to replace a natural rock ledge*." **There never was a natural drainage lake in Lincoln and Estabrook Parks. Deepening and widening of the 1.5-mile river reach altered or destroyed those features or buried them in accumulated sediment after constructing the dam and impoundment. Construction of the Estabrook Dam and impoundment did not replace the unique historic features of the Milwaukee River. It did not replace the former narrow and deep meandering river and floodplain wetlands. It did not replace historic fluvial processes that transport water and sediment, build floodplain and maintain historic and sustainable water depths. By all measures, the Estabrook Impoundment is longer by 1-mile, deeper by at least 0.4-feet, larger by 38-acres, and wider between 140-feet and 350-feet than the historic Milwaukee River.**

Article Continues - Pages: 1 2

You Might Also Like

OP-ED

Don't Repair the Estabrook Dam

Taking issue with Urban Milwaukee's series. First of two parts.

By Will Wawrzyn - Mar 15th, 2016 10:42 am

Does sedimentation impact the sustainability and uses of the Estabrook impoundment?

Management of sediment quality and quantity is the most important issue affecting the near-term (years) and long-term (decades) outcome following a decision to repair and operate a dam or to remove a dam. Sediment functions as the major storage and recycling compartment for virtually all material that flows into and out from aquatic ecosystems. The quality and quantity of sediment directly or indirectly affects all of the other management issues. Managing sediment quality and quantity is the most technically challenging and costly part of maintaining or removing a dam, especially in developed watersheds and in particular those with a large contributing urban land use.

Mr. Holmes stated that *"In terms of sediment accumulation, based on the storage capacity of the impoundment relative*

to the mean average annual flow volume of the Milwaukee River, the sediment trap efficiency of the impoundment should be nearly zero". Ideally yes ...

There are a number of time consuming analytical and empirical methods to conclude that the Estabrook impoundment was and will continue to be (an effective) a sediment trap. However, recent planning and construction documents for the Estabrook Impoundment dredging and sediment remediation project should be adequate. Over the course of the Estabrook Impoundment's Blatz Pavilion, and Phase I and Phase II sediment remediation projects, hundreds of samples were obtained to document the thickness, volume and mass of accumulated contaminated sediment. The survey boundaries included the lower reach of Lincoln Creek, and the impoundment extending from the Estabrook Dam upstream to just beyond the confluence of the river's "east" and "west" oxbows in Lincoln Park.

While the thickness of accumulated sediment was variable, large amounts of sediment had accumulated in all areas of the impoundment up to 10-feet. The total volume of accumulated sediment in the Estabrook Impoundment is not readily available. However, the current estimate of just the volume of contaminated sediment removed from the impoundment is 176,200 cubic yards, **equivalent to over 12,580 dump trucks**. In relative terms, if estimates included the volume of uncontaminated sediment, the total volume of all accumulated sediment in the impoundment would be much larger.

The original Public Service Commission approval for constructing the dam in the 1930s was for a full pool and run-of-the-river dam, meaning that the gates would be closed year round, except under extreme flood events. Over the last several decades and for reasons not entirely understood, the County has departed from this operating protocol by opening the gates every fall and closing the gates in spring.

These extended drawdowns negatively impact habitat upstream and downstream of the dam by eroding accumulated sediment and debris. During just a single drawdown event sampled on October 12, 1994, an estimated

Press Releases

Bucks Release New Arena Renderings Ahead of Design Submission to City by Milwaukee Bucks

Rep. Wachs to GOP U.S. Senators: Do Your Job! by Dana Wachs

U.S. Senator Tammy Baldwin Statement on President Obama's Nomination of Judge Merrick Garland to the United States Supreme Court by Tammy Baldwin

Read more Press Releases

CONTRADICT THIS VIEW, and therefore the professionals, Also, Estabrook dam is classified by the WDNR as a "Large dam" ~~The~~ Tanya Meyer study does not apply.

"14) What about RK's lawsuit? What if the county board decides to repair the dam? - repair of the EStabrook dam will not abate the public nuisance."

** RE INDISCRIMINATING "BLANKET USE OF STATUTARY LANGUAGE"

Here is The ESSENCE

The 2 WDNR orders ~~unfortunately could not be backed up by~~ Calculations. Therefore, they were later exposed as FALSELY predictive of dam failure. Therefore, the RK's lawsuits are nuisance suits and should rightfully be treated and exposed as such. ← Needs REWRITE

against ESTADAM were BOGUS.

In Sept. 2008 & in 2009 the WDNR Dam Safety Engrs. issued 2 orders asserting false "FACTS" which they still can can not produce CALCULATIONS to support. When anyone in an official role suggests a DAM is about

" Removal is the only option that will abate the nuisance permanently"

TO collapse and wipe out the city all of us were concerned. By bullying with unfunded mandates the DNR req'd us to pay $200,000 for private professional engrs and DIVERS to do a review (& might we say "to seek any rationale what soever for REMOVAL.)

The ONLY real nuisance is The RK's Lawsuits Based upon a FALSE PREMISE " " have Taken up thousands of hours of Lawmakers attys + judicial time Is there something we can do about These ?,

These engrs DID the CALCULATIONS & underwater studies and found The dam was in NO danger. YET, the DNR refused to retract their false orders, plainly stated They could produce NO CALCULATIONS to support the orders Stonewalled our letters & calls to restore the water levels, AND let The drawdown continue for 7½ years.

103 tons of sediment and 1.1 pounds of PCBs were initially scoured from the impoundment when the gates were opened. The amount of sediments and pollutants flushed from the impoundment during the remainder of the 7-month drawdown and higher spring flows was not sampled or quantified by the study. If the County had not been conducting these annual drawdowns, the amount of accumulated sediment in the Estabrook Impoundment would have been much larger.

Additional impacts associated with partial or complete seasonal impoundment drawdowns include scouring of polluted sediment and debris downstream; high flows and freeze/thaw cycles that contribute to erosion of river bed and banks; desiccation (drying out of parts of the river), freeze-out and increased predation of mussel beds; desiccation, freeze-out and erosion of aquatic plants, invertebrates, and herptiles; de-watering of floodplain wetlands; loss of fish spawning substrate and juvenile fish refuges; fish stranding and fish kills by asphyxiation, and poor fish year class recruitment; and degraded aesthetics to describe a few.

Should the dam be repaired, the DNR's Operational Order may not, and should not, allow the County to practice a partial or complete annual opening of the dam gates which would allow flushing of accumulated sediment downstream, and other negative environmental impacts. All impoundments accumulate sediment. Depending on the quality and quantity of accumulated sediment, the desired function and uses of the impoundment may not be sustainable. With respect to the Estabrook Impoundment, the County and dam repair proponents must recognize that the negative environmental impacts of annual drawdowns

greatly exceed any perceived benefits of flushing accumulated sediment from the impoundment. If owners of the dam and a limited number of power boat users of the impoundment are unwilling to accept the consequences of sediment accumulation, they should consider other dam management alternatives and uses of the river that are sustainable, benefit the environment, provide more diverse uses for a larger segment of the population, and all at a lower cost.

Be the first of your friends to like this

The Estabrook Impoundment will continue to accumulate sediment high in nutrients and organic matter. With sufficient sunlight penetrating all water depths throughout the impoundment, conditions will be ideal habitat for producing nuisance amounts of benthic algae and rooted aquatic plants. These conditions were present in the former North Avenue impoundment and other impoundments in the Milwaukee River watershed prior to dam removal and were responsible for nuisance amounts of algae and rooted aquatic plants, in particular non-native Eurasian watermilfoil and Curly-leaf pondweed, which unlike many native plant species, are tolerant of degraded habitat. Native fish diversity and abundance were greatly reduced and the destructive non-native carp populations were abundant. The Estabrook Impoundment will not be immune to developing similar nuisance conditions.

When the final accounting is completed, the cost to taxpayers to remove just the accumulated contaminated sediment will approach $49 million dollars, dwarfing the $6.2 million cost of repairing, operating and maintaining the dam and proposed fishway over the 20-year lifetime left for the structure. According to structural engineers, the entire gated section of the dam will have to be replaced 20-years down the road. Repairing the Estabrook Dam will lead to more sedimentation over time and negatively impact the environment and recreational uses. Following the sediment remediation projects and the extended 7-year drawdown since 2008, the Estabrook Impoundment is as good as it will be. As sediment continues to accumulate, the functions and uses will decline, and assuming the County will not be able to flush sediments as in the past, the rate of degradation will be at a faster rate than previously experienced. If the dam is

Recent Comments

Kurt on **Bucks Release New Arena Renderings Ahead of Design Submission to City**

Bill Sweeney on **Data Wonk: Caperton Rule Could Kill John Doe Decision**

John Casper on **Rebecca Bradley's Last 48 Hours Have Been Spin Not Substance**

Tony B. on **Duel Over the Domes**

Kerri on **New Milwaukee Restaurant and Rooftop Bar & Lounge Opening this June**

repaired, will the next generation of residents along the impoundment and their County Supervisor ask the rest of the County taxpaying residents to repeat this financially burdensome dam replacement and dredging process?

What are the impacts of the Estabrook Impoundment on Fish and Aquatic Life and Habitat?

The addition of fish passage will have no bearing on fish habitat in the Estabrook Impoundment. It will not affect habitat aside from the footprint it is constructed on. A fishway will not affect the most important issue impacting fish habitat and the fishery in the impoundment, that being the quality and quantity of sediment and the rate by which it accumulates.

The quality and quantity of sediment has a direct and indirect effect on fish and aquatic life habitat. Nutrients and organically rich sediment can produce nuisance growth of plant material that decrease dissolved oxygen levels (through plant respiration and decomposition) that contributes to sediment oxygen demand or lower oxygen levels). Eutrophic and turbid water quality conditions benefit pollution tolerant, non-native aquatic plant species such as Eurasian watermilfoil at the expense of native species that are better utilized for food and cover by fish, other aquatic life and wildlife. The accumulation of impounded sediment enriched by substances such as heavy metals and PAHs from urban runoff can have acute and chronic impacts on fish and aquatic life at all life stages and the impacts can extend over generations. The accumulation of silty-clay sediment, potentially toxic compounds, nutrients and organic matter from benthic algae and decomposing plant material create very inhospitable habitat for fish and other aquatic life. This condition will not be changed with dam repair.

The value of flowing rivers and streams with clean and coarse substrates and connected floodplain wetlands as critical fish habitat cannot be over stated. Most of the approximately 60 native fish species present in the Milwaukee River and its tributaries evolved and are specialized for all or a portion of their life cycles (spawning/reproduction, development, feeding and growth)

New Faces

MCW names Chief Historian and Senior Associate Vice President for Communications

Medical Society of Milwaukee County Announces DR. Brian Peterson as Board President

Wisconsin Center for Investigative Journalism hires National Geographic editor to lead digital, multimedia work

More New Faces

in flowing rivers or streams, and floodplain wetland habitats. Fish require clean and coarse substrate for spawning and successful embryonic development; their diets are primarily aquatic insects that also require clean and coarse substrate; they spend most of their lives in direct contact with the substrate; many are intolerant of degraded water quality and sediment; and some require wetlands and aquatic plant vegetation for spawning and nursery habitats. These critical features are generally absent from the Estabrook Impoundment. As the impoundment continues to accumulate silty sediment, habitat suitable for preferred native species will be poor, which means less native fish will successfully reproduce and recruitment to local populations will be low.

IF ONLY YOU could require full pond year round ... This can be The result eh?
Is it HONEST TO ASK for what you don't want?

By quoting false "FACTS"
So, you forced us to leave the gates wide open for over 7 years
and you still couldn't DUMP enuff "SILT"
If you want SUBstrate
you're going to pay for it
and piecemeal it can be done -
A 20 year plan for the DNR/EPA
budget perhaps? One thing for sure; Milwaukee area taxpayers
could not possibly get enuff fish
outta there to cover these costs.

Habitat quality affects the diversity and abundance of the fish community. Inversely, the presence and abundance of a single species can change the dynamics of a river ecosystem, including its habitat. There may be no better demonstration of a fish species' negative impact on aquatic ecosystems than the non-native common carp. Carp will do very well in the Estabrook Impoundment. No other species, native or non-native, is so well adapted to degraded habitat, and modifying habitat to their benefit and at the expense of native species as the carp. Carp spawning success is reduced in flowing water with coarse substrates. Optimum spawning habitat is slack backwater areas with vegetation. Carp tolerate high water temperatures and turbidity, and low dissolved oxygen levels, and incubating carp eggs can tolerate silty sediment. As omnivores, carp consume a wide range of food types and can adapt to changing food supplies caused by environmental degradation. As bottom feeders, they have adapted to feeding on small invertebrates also tolerant of fine silty substrate and poor water quality. As carp feed, they re-suspend nutrient-rich silty sediment and uproot aquatic vegetation and by doing so increase turbidity. Turbid water is not tolerated by native aquatic plants, and as a result, native plants populations decrease and non-native plants tolerant of turbidity such as Eurasian watermilfoil and benthic algae flourish. Turbid water limits site feeding by top predators such as northern pike and bass that might otherwise feed on younger carp before they reach spawning age. The accumulation of silty substrate and turbid water

So, you overstate your case
and allege that only carp
exist in our Lake?
This time, WILL, people
are going to scrutinize
what you say
and THIS TIME
you're going to lose.
And it is right.

— Shallower depths
over 10' of silt
will produce more
Turbidity.

quality also negatively impacts the bottom of the food chain—the aquatic macroinvertebrates that live in the streambed—as well as aquatic mussels. Absent natural controls, carp populations can proliferate in just a few years. Successful spawning and recruitment of carp will infect more than just the Estabrook Impoundment as offspring will migrate to other reaches of the Milwaukee River and its tributaries, the Milwaukee Estuary and Lake Michigan. Prior to removal of the Milwaukee River's North Avenue Impoundment, the feasibility study correctly predicted a decline in carp populations and an increase in smallmouth bass populations. These predictions were consistent with those observed following the removal of the Milwaukee River Woolen Mill Dam at West Bend.

Following removal of the North Avenue Dam, improvements in the riverine habitat increased native fish species diversity several fold in the formerly impounded area from six native species in 1990 to 35 native species in 2012. Smallmouth bass became and remain the most abundant game species. Additional native game fish include walleye, northern pike, channel catfish, largemouth bass and rock bass. Concurrent with the improved diversity and relative abundance of native fishes, there has been a dramatic decrease in common carp populations that once comprised over 90% of the numbers of fish and total biomass. Overall environmental quality as measured by the fish-based Index of Biotic Integrity (IBI) bioassessment model increased from "poor" prior to removal of the North Avenue Dam in 1996 to "good" to "excellent" following dam removal in 1997 and through 2012. Similar improvements in fish habitat and fish communities have been observed at dam removal projects elsewhere in the Milwaukee River watershed. There are no reasons not to expect comparable improvements in the Milwaukee River habitat and the fish community should the Estabrook Dam be removed. Inversely, as the Estabrook Impoundment continues to accumulate polluted silty substrate, there is no reason not to expect degraded fish habitat and a fish community dominated by a few tolerant species and an abundant carp population. Removing the Estabrook Dam will have the greatest positive impact on fish and aquatic life habitat, preferred native fish stocks, and both recreational and subsistence fishers.

- Fishermen and BOATERS in WEST BEND STILL Hate the DNR for what they consider DISHONEST claims and LOSS of HUMAN HABITAT. MIGHT be a good PR study for the WDNR.

From a fisheries biologist perspective I too love these results. But! Both access for more species AND The silt question WILL be better solved w/ in the existing plan for Dam Repair w/ a fish ladder.

Well . . . Bedrock . . .

The loss of a beautiful already landscaped URBAN recreational citizen/boating paradise - The gemstone of the entire watershed area AND the uncertainties re what dam removals will do to Lake Michigan require the most CONSCIOUS choice - a choice that was NOT made at NorthAve - And that story can NOT be suppressed forever.

Will Wawrzyn is a former employee of the Wisconsin Department of Natural Resources. Prior to retiring in 2015, he was a water resources biologist (1977-1996) and fisheries biologist (1997-2015) working out of the UW-Milwaukee School of Freshwater Science.

Article Continues - Pages: 1 2

Op-Ed

Dick A. Yahr
5270 N Milwaukee River
Milwaukee, WI 53209-5140
414-351-5142

COMMENTS from RICHARD YAHR 3.31.16

DRAFT ENVIRONMENTAL IMPACT STATEMENT (dEIS) Department of Natural Resources (DNR)
Southeast Region

NOTE TO REVIEWERS: This document is a DNR draft environmental impact statement (dEIS) that evaluates probable environmental effects. Your comments should address the completeness and accuracy of the dEIS. For your comments to be considered, they must be received by the contact person before 4:30 p.m., April 6th, 2016.

Contact Person: Kristina Betzold

Title: Environmental Analysis and Review Specialist

Address: 2300 North Doctor Martin Luther King Jr. Drive, Milwaukee, WI 53212

Telephone Number: (414) 507-4946

Email: kristina.betzold@wisconsin.gov

Applicant: Milwaukee County Parks

Address: 9480 Watertown Plank Road, Wauwatosa, WI 53226

Title of Proposal: Estabrook Dam Rehabilitation and Operation

Location: Cities of Milwaukee and Glendale, Milwaukee County, Wisconsin

Township Range Section(s): Northeast Quarter of Section 5, Township 7 North, Range 22 East

DAM FAILURE and COLLAPSE. In fact, NO DANGER of immanent ~~or~~ was ever established and ~~perhaps~~ The county hired engineers who DID the work of calculations which showed the WORK orders were in error. Concern exists whether the DAM Safety Dept has routinely failed to do due diligence as such. and have been overstepping their rightful STATUTARY ROLE.

1. Overview of the proposal

Milwaukee County, a Wisconsin municipal body corporate, owns and operates Estabrook Dam in the Milwaukee River near Estabrook Drive and West Hampton Avenue. The dam was built in the late 1930's. The construction also included excavation of a channel for the gated section of the dam. The Wisconsin Department of Natural Resources (the Department) issued an Administrative Order to Repair or Abandon Estabrook Dam dated July 28, 2009, requiring the County to drawdown the impoundment due to safety concerns until such time as the dam can be either repaired or removed. The Department had also previously issued an Administrative Order to Repair Estabrook Dam dated September 26, 2008 requiring the County to drawdown the impoundment until the dam was repaired, due to a damaged stoplog section of the fixed crest spillway. As a result, the dam gates have been open since 2008. Repairing the dam is a Minor action and establishing an operating order is an Integrated Analysis action under NR 150.20, Wis. Adm. Code. While neither action requires an EIS, the Department has elected to use the EIS process to facilitate public review. There is no federal requirement to prepare an EIS.

ALLEGED & LATER SHOWN UNSUPPORTABLE BY CALCULATIONS.

LATER IDENTIFIED by PARKS Dept as a $5000 repair, replacing not only the 9 damaged stoplogs, but all 82' of WOODEN that STRUCTOR

Milwaukee County has solicited public and regulatory input on a series of alternatives to repair, replace or remove the dam. Upon receiving this input, Milwaukee County has selected to repair the dam with construction of a fish passage structure and is proceeding with plans for implementation. The Department will issue a Dam Operating Order to be implemented post-project completion. The County has proposed to operate the dam with a year-round, normal water level pool.

THIS, based upon an interpretation of a 1937 PSC permit, which was correctly adjusted during the 1st year of operation due to the failure of heating elements designed to protect the gates from ice lock & ∴ wide spread FLOOD RISKS. ENVIRONMENTAL Benefits to the HUMAN ENVIRONMENT, but also downstream NUTRIENTS AND ~~costs of~~ DREDGING COSTS WERE ABOUT ZERO for over 70 years.

2. Purpose and Need

Estabrook Dam was constructed during the late 1930's by the Civilian Conservation Corps (CCC) and Civil Works Administration (CWA). The dam was constructed with 10 gates that could be opened during times of flooding and closed during low water in order to maintain a 103-acre pool of water above the dam for boating, bathing and fishing. The gated section of the dam extends from County owned parkland on the north bank of the river to a central island owned by Milwaukee County. A fixed crest spillway then extends from the island to private lands on the south bank of the river. On May 26, 1937, Milwaukee County received authorization from the Public Service Commission (PSC) of Wisconsin to construct, operate and maintain the dam with a run-of-the-river and normal water operating level equal to the elevation of the fixed crest portion of the spillway. Documentation of this authorization and historical information on the construction of the dam is on file with Milwaukee County Parks Department. Documentation describing when and the reasons for the County instituting a fall through spring drawdown are not known. The earliest correspondence describing manipulating

NOT quite true. Documentation exists, I believe, re. the design failure of heating elements on the dam gates on "AS BUILT" CONSTRUCTION DWGS.

the dam gates for purposes of abating flooding and drainage problems was a letter from the City of Milwaukee to the County Parks Director in 1986. [Please. REVIEW "AS BUILT" plans]

Please provide exact dates for Photos to determine FLOW Quantities & SEASON.

Prior to the construction of the dam, the area located 0.5 miles upstream of the current dam was a rock ledge where the bedrock was higher in this section of the river. Based on measurements obtained from 1937 aerial photographs, the rock ledge maintained a low-gradient meandering channel dominated by runs and pools. The average width upstream of the rock outcrop crest to the 130-degree bend upstream of Silver Spring road was less than 180 feet bounded by expansive wetlands. Based on pre-dam1937 aerial photographs and numerous other surveys and topographic maps, the river morphology never included a widening or "natural lake-like" feature. There are no historic documents that describe the depth of the river before modifications were made but the crest of the rock outcrop was lowered by six to seven feet suggesting the maximum depth would have been about the same and decreasing upstream.

Is this a matter of definition?

This appears in Photos NOT TO BE BEDROCK EXCAVATION.

CCC hired the 700 men with shovels & wheel barrows to do the Central Channel's

Beginning in 1935, the rock ledge was excavated within the river channel, resulting in a deeper river channel that was widened and straightened for approximately 6,000 feet near the confluence of the east and west oxbows to abate flooding. The channel modifications were considered only partially effective for mitigating flooding and ice dams, in particular between West Silver Spring Drive and Bender Road (Wisconsin State Planning Board, 1940). The buildup of ~~frazil~~ ice dams along the river upstream of Silver Spring Drive were reported as recently as the winter of 2014 despite the dam gates being fully opened and the pool drained since 2008. Historic planning documents inferred that the channel modifications would not be effective at reducing ice dams upstream of Silver Spring road due to the bend in the river and narrower channel widths. The public requested the local government construct a dam to create a pool for enhancing parkland aesthetics and recreational purposes. The dam was built with 10 gates to allow for adjusting the upstream pool elevation presumably for maintenance of the dam and to convey flood flows.

concerns of POSSIBLE

BECAUSE the dam gates were left open, effects in this area have changed and are the results of a number of factors - including willow trees blocking free flow in The East Oxbow and The Central Channel. LET US be more careful in our attributions of CAUSE.

QUITE INTELLIGENT, Those engineers of OLD... IF the gates were opened only every 10 yrs± for maintenance, Think of The Large ~~dams~~ SLUICING of CONTAMINENTS which moved FLOW. The TIME PROVEN Mode appears quite superior to the FULL POND year round "SOLUTION"

Estabrook Dam was inspected in 1995 and 2004. The following deficiencies were noted as work directives with timelines for completion:

- [1] The gates of the dam require a variety of work and must be repaired and all returned to operating condition.
- [2] The stoplogs and their supports on the fixed spillway need to be replaced (YES!)
- [3] The left and right abutments of the dam need to be repaired and stabilized with firmly compacted soils and riprap.
- [4] Concrete repairs need to be made to the piers of the dam
- [5] The icebreakers upstream of the gated section of the dam are deteriorated and must be removed or reconstructed. ?
- [6] The concrete access stairs on both the left and right sides of the dam are unsafe and must be rebuilt.
- [7] Trees and shrubs are growing in areas around the left and right abutments of both the gated sections of the dam and fixed crest spillway and must be removed and their holes filled with compacted tight soils and planted over with grass to stabilize the area.
- [8] Extensive debris must be removed from both the fixed crest spillway and ice breakers upstream of the gated sections of the dam. Some of the debris may have comingled with contaminated sediment and may need to be handled and disposed as contaminated material.
- [9] Signing must meet specifications.
- [10] A structural analysis including scour/undermining analysis of the dam must be completed. A structural analysis was submitted to the Department on September 28, 2010 which recommended structural reinforcing by adding tie down steel anchors to be grouted into bedrock on the upstream side of the gated spillway. This additional RE BAR → is only recommended IF FULL POND / yr. ROUND OPERATION IS CHOSEN, WHICH HAS DETRIMENTAL ASPECTS WHICH MUST NOT BE IGNORED.
- [11] An Inspection, Operation and Maintenance Plan must be developed as well as an Emergency Action Plan.

Thanks you for not assuming at this time, what was not established then.

NOTE. All 11 pts suggest good & OPTIMAL Operations - Normally PUT INTO ANNUAL Budgets as "WISH LIST", Expenses which right-fully deserve attention ON The "deferred maintenance" LIST. ONLY PT #2 CONSTITUTES an IMMANENT NECESSITY. Nonetheless, we value The DNR's encouragements for high level maintenance!

Question: what % of The State's 3900 Dams have SUCH A PLAN? NOW?

The Department's Administrative Order dated July 28, 2009, required the County to repair or abandon/remove the dam within established timelines and also required the County to maintain the dam under a drawdown condition until the repairs were completed. The repairs pertain to structural improvements and reconditioning of the gates to maintain proper operation. The structural improvements include installing rock anchors to stabilize the dam under all anticipated loading conditions. In addition, debris which has collected at the dam needed to be removed. Some tree removal near the dam structure was also required. *Because of Rigid compliance to This environmentally incorrect DIRECTIVE an estimated ~~60~~ 10K tons of PCB laden (370 PPM's!) w/ Photos were fleshed downstream from The WEST OXBOW (PROJECT)

Milwaukee County retained a consultant to investigate the dam condition in 2010, to assess sediment quality and quantity upstream of the dam and to design improvements to the dam to meet the Department's Administrative Order.

C2HMHILL?

Only assessed PCBs and some PAHs - NOT a wide enough evaluation

"Project. AN indeterminate amount of only partially identified solids were SLUICED during The East Oxbow FLUSHING, wherein ALL of the river flowed only in The E. Oxbow. Requests to the WDNR, informed concerns of The environmental damages, were STONEWALLED and The dam gates remained open.

*** Oh! Did anyone test for Phosphorus? lead, copper, cadmium, ZINC, manganese, arsenic Chromium, nickel? How about hexavalent chromium? - All these toxins found just 1-3 miles Downstream in excess of USEPA standards ... These are All ENVIRONmental pollutants which may be washed/SLUICED DOWNSTREAM BY increased stream velocities WHEN A DAM IS LEFT OPEN.

The United States Environmental Protection Agency (USEPA), the Department and Milwaukee County have investigated the sediments upstream of Estabrook Dam. Contaminated sediments containing organic and inorganic pollutants including carcinogenic polycyclic aromatic hydrocarbons (CPAHs) and polychlorinated biphenyls (PCBs) were removed from the west oxbow of the Milwaukee River and Lincoln Creek about one mile upstream from the dam in 2011. Additional sediment was removed during 2015, including sediments directly behind the fixed crest spillway. Further information on the sediment removal project can be found at the WDNR project website: Thank you for THIS WORK.
http://dnr.wi.gov/topic/greatlakes/lincolnpark.html . Sediments contaminated with PCBs and PAHs were found upstream from the dam and removed as part of the Lincoln Park Phase 2 project. Approximately 52,000 cubic yards of contaminated sediment were removed from the Milwaukee River, starting with the main channel between the oxbows and from directly behind and upstream from the fixed crest spillway.

Repairs to the Estabrook Dam were designed by an engineering firm and plans and specifications for these improvements have been on file at Milwaukee County since 2011. Access easements from adjacent property owners were acquired by the County to allow construction work at the dam.

On January 17, 2012, the Bureau of Land Management (BLM) informed Milwaukee County that the island at the dam was under BLM jurisdiction and an approval from BLM would be necessary to perform construction work on the dam. The proposed construction work would include structural repairs to the dam and removal of tress within 15 feet of the dam. The BLM said the National Environmental Policy Act (NEPA) must be followed and that an Environmental Assessment for the project must be prepared including evaluating practicable alternatives to dam repair. So, False claims were made - perhaps to delay the project?

In 2014, a Milwaukee-based citizen's alliance organization raised questions as to BLM's jurisdiction of the island. Aerial photographs from the 1930's have showed the property is part of Milwaukee County's Estabrook Park and that the island was created by the excavation of the new river channel to construct the gated section of the dam. BLM reviewed the documents on file and formally concurred that they do not have jurisdiction of the island in a letter to Milwaukee County dated June 24, 2015. BLM is no longer an agency having regulatory authority for the project.

Also in 2014, a Milwaukee-based non-profit organization filed a lawsuit against Milwaukee County claiming Estabrook Dam is a public nuisance. On May 24, 2014, the State of Wisconsin Circuit Court declared that Estabrook Dam is a public nuisance and ordered Milwaukee County to remedy the nuisance by repairing or removing the dam. Please take note That not one of the claims made by ANY Riverkeepers were contested by corporation counsel. Some claims were beyond Blatantly False & for Public Knowledge should be opened to REINVESTIGATE

Because of the fiscal components of the project, Milwaukee County Board of Supervisors has decision making abilities as to whether the dam would be repaired or removed. The Board has considered options for the dam through an alternative analysis done by an independent consulting firm, which included capital and operational costs of the alternatives. The Board decided in 2015 that the dam would be repaired. [Also in 2008, 09, 10, 11 - 15? The Board NEVER WAIVERED.]

Milwaukee County re-submitted plans for repair to the Department on November 23, 2015. The repairs were re-submitted due to additional deterioration at the dam since the original plans were submitted in 2011. The updated repair plans also included a preliminary fish passage design. The final fish passage design will be submitted before the Department issues a plan approval. UNLESS The remedy is a NUISANCE SUIT against the Riverkeepers

Estabrook Dam currently does not have an operating order, but the County has operated the dam gates and pool water level based on two annual periods: a summer plan (mid-May to mid-September) whereby the gates are generally closed to maintain impoundment at a full pool, and for the remainder of the year (mid-September to mid-May) the gates are opened and the pool is drained. Additional provisions are in place to adjust the summer gates and pool water level in the event of flooding. These provisions entail opening the gates to accommodate the flood. Provisions are also in place to pass flow downstream during low flow conditions. (with some flexibility early MAY to as late as DEC 12) but limited to NOT causing boats to be TRAPPED & BOTTOM OUT.

The Department has committed to issuing an operating order for the dam. An operating order is an official Department issued document that will establish water levels on the river at the dam and upstream of the dam, and specify standards of operation for the dam. Water levels upstream of man-made impoundments are regulated by the Department under s. 31 02, Wis. Stats. The goal is to develop an operating order that will improve the Milwaukee River ecosystem as well as balance the needs of those who own land on the river upstream of the dam, recreational users and Milwaukee County. The normal water level would be established at 616.6 feet National Geodetic Vertical Datum of 1929 (NGVD29). The normal water level would be maintained to the maximum extent practicable by the reasonable and proper operation of the gates. Although there would be no established maximum or minimum water level, operation of the dam would be consistent with keeping water levels within 0.5 feet above or below the normal water elevation. The normal water level elevation is currently proposed based upon the conceptual fish passage design and could change slightly, depending upon the final fish passage design.

Full pond year round at or about 616.6 (NGVD 29) is a recipe for FAILURE & MUST be discarded. (1) Would result in sediment build up to NEAR the top of the gates & require more frequent & costly dredging. From 1937-2008 I have seen NO Record of dredging required. (2) If NUTRIENT "STARVATION" downstream is a real issue ... the problem is increased (3) During FLOOD events, All the SILT would be washed downstream suddenly. The FRAMERS of the past "de facto" operational order may deserve a bit more RESPECT. Over the years of research

I have many times discovered NUANCES in design + operations based on experiential wisdom of these engineers of old. NOW again, our consciousness may be challenged by new circumstances. The floor of the central channel has been altered, a NEW Berm appears just upstream of the channel - THE East OXBOW is partially blocked by new Beaver Dams. Also, the wide + shallow central channel INVITES MORE SEDIMENTATION and the low slope of the river bottom in this reach of the river has resulted in low soils transport especially in the central channel. The POINT is, a RIGID operational order may result in more PUBLIC DANGER than ever before. CONFUSION in time of flood level RAINSTORMS MUST NOT be created. ~~THE PAINTED~~. "Home RULE" may be a far more prudent choice to determine our choices.

3. Authorities and Approvals

Local:

1. Right of Entry Permits from adjacent landowners
2. Construction Site Erosion Control Permit from City of Milwaukee/City of Glendale
3. City of Milwaukee/City of Glendale Floodplain Zoning Ordinances

State:

1. Wisconsin Statutes, Chapter 30 permits for structures, shoreline stabilization, and dredging
2. Wisconsin Statutes, Chapter 31 regulation of dams and bridges affecting navigable waters
3. Wisconsin Statutes, Chapter NR 281.36 permit for discharges into wetlands
4. Wisconsin Administrative Code, Chapter NR 216 Wisconsin Pollutant Discharge Elimination System (WPDES) stormwater and wastewater permitting
5. Wisconsin Administrative Code, Chapter NR 333 design standards for large dams
6. Wisconsin Administrative Code, Chapter NR 116 floodplain management program
7. Wisconsin Administrative Code, Chapter NR 40 invasive species
8. Wisconsin Statutes, Chapter 29.604 and Wisconsin Administrative Code, Chapter NR 27 Endangered Species - Natural Heritage Inventory
9. State Archaeological site clearance required

Federal:

* C. Clean Water Act 1972 + 1977 and as amended - to include SECT 404 + esp. 404F

1. Toxic Substances Control Act (TSCA) compliance
2. US Army Corps of Engineers ~~Section 404~~ REGULATORY GUIDANCE LTR 05-04 (as amended) §[19]05 and
3. National Historic Preservation Act compliance
4. Tribal historic/cultural review
5. Federal Emergency Management Agency (FEMA) review of regional floodplain elevations
6. Federal Endangered Species Act

4. Alternatives

Milwaukee County submitted an Environmental Impact Report (EIR) to the Department on October 9, 2015, which included a proposed operating order for the dam, as well as alternatives to repair that were considered. These alternatives included a no-action alternative, rehabilitation of the dam, rehabilitation of the dam with provisions for fish passage, removal of the dam, construction of a new dam, and removal of the dam while installing a "rock ramp" to develop a pool upstream similar to a dam, that would also allow for fish passage. The Environmental Impact Report and details on these alternatives, including the capital and operational costs of the alternatives, can be found at http://dnr.wi.gov/topic/EIA/documents/EstabrookEIR.pdf.

Milwaukee County's proposed action is to repair the dam with construction of a fish passage structure. The fish passage will allow fish to migrate during spawning and other periods of the year, which promotes fish and mussel diversity, enhances fish and mussel populations and fishing opportunities, and is intended to replicate conditions in a free-flowing river. The County has proposed to operate the dam and fish passage with a normal water level pool elevation, year-round. In addition, both full and partial winter drawdowns are being evaluated.

+ Successful history of flood control shall not be disregarded.

Normal Water Level Operation

During this operation the six gates will be closed the majority of the time. The County would employ a dam gate operator to monitor river flows, river levels, debris, weather conditions and will open and close gates to maintain normal pool elevation as best as possible. A normal water level in the pool would be based on the fixed crest spillway elevation and the entrance weir to the fish passage. The gates would be operated as needed to maintain the normal water level. If rising water levels occur above the normal, the County would have the option to open gates to adjust pool levels accordingly.

Alternative #1- Full Winter Drawdown Operation

From May 15th to September 15th of the calendar year, the gates would be closed and would operate to maintain normal water levels. The pool would be completely drawn down on September 15th. The gates would be operated to limit the drawdown to 6 inches or less per day as per the Department requirements. All stoplogs would also be removed. Following complete drawdown all gates would remain open until May 15th. The pool would be refilled no earlier than May 15. This schedule could vary depending upon weather and river flow conditions. During refilling, Estabrook Dam would be required to pass at all times a minimum flow downstream at least 25 percent of the natural low flow (s. 31.34, Wis. Stats).

Alternative #2- Partial Winter Drawdown Operation

From May 15th to September 15th of the calendar year, the gates would be closed and would operate to maintain normal water levels. The pool would be lowered three feet starting on September 15th. Throughout the winter season, the six gates would be closed and the stop logs removed to lower the impoundment by three feet. The gates would first be opened to limit the drawdown to 6 inches or less per day as per the Department requirements. Once the pool had been lowered below the bottom of the stoplogs, the stoplogs would be removed. After stop logs were removed, the gates would be closed. The pool would be refilled no earlier than May 15. During refilling, Estabrook Dam would be required to pass at all times a minimum flow downstream at least 25 percent of the natural low flow (s. 31.34, Wis. Stats).

5. **Manipulation of Terrestrial Resources**

Manipulation of Terrestrial Resources needed for Repair with Fish Passage

The following repairs will be made to the Estabrook Dam according to the design construction documents and to comply with the Department's Administrative Order of 2009.

- Concrete will be repaired.
- Exposed reinforcing rod will be reconditioned.
- Supplemental reinforcing will be installed as necessary.
- Grouted tie-down rock anchors and associated components on the upstream ends of the piers will be installed.
- Steel slide gates and their components will be reconditioned.
- Concrete and stone rubble overflow spillway will be repaired.
- Steel framing and associated components of the stop logs at the north end of the fixed crest spillway will be reconditioned or replaced.
- Concrete icebreakers will be repaired or replaced.
- Slope protection (rock riprap over geotextile fabric) upstream and downstream of the gated dam structure will be installed.
- Dam safety signs on the island and gated structure and new portage signs will be installed.
- Vegetation will be cleared from the abutments, access roads and staging areas.

The construction of the fish passage structure along the north shore (left bank when looking downstream) will consist of a rock ramp including pools and riffles. A structural wall constructed parallel to the shore will separate the fish passage from the rest of the river. This wall will be connected to the compound weir, which runs perpendicular from the shore.

The two walls create a rectangular box along the north shore. The fish passage is located upstream from the dam in the area of the first four gates on the north end of the dam. These four gates will be removed because river flow through the fish passage is controlled by the fish passage structure. The compound weir allows control of the river flow during both high and low flows, while maintaining at least 10 percent of the flow through the fish passage during spring runoff conditions. (We pray your HYDROLOGIC modeling is without flaw.)

The dam repair order calls for the permanent removal of all trees and shrubs from the area within 15 feet around the north and south abutments for both the fixed crest spillway and gated sections of the dam. Removal is to include the complete removal of the stumps and roots, filling of the holes created with compacted tight soils and adding topsoil and grass seed to stabilize the area.

Milwaukee County Parks will work with the contractors and the Department to determine the trees that can be preserved. All areas that are disturbed from this project will be restored to the satisfaction of the Milwaukee County Parks Department, other affected landowners and the Department. Temporary roads and staging areas will be constructed to access the dam for repairs. The sediments behind the fixed crest spillway have already been removed as part of the sediment cleanup project. Access roads will allow for truck access to the dam for repairs. A perimeter fence will be constructed to restrict public access to the construction work zone.

During construction, access to the river from both the left and right banks will be required. Access to the northern portion of the dam will be through Estabrook Park. Access to the southern portion of the dam will come through negotiated access easements to private lands on the right (south) bank of the river.

Manipulation of Terrestrial Resources needed for Normal Water Level Operation

No manipulation of terrestrial resources would be needed.

Manipulation of Terrestrial Resources needed for Alternative #1- Full Winter Drawdown Operation

An operating deck for safe removal and installation of the stoplogs would be needed.

Manipulation of Terrestrial Resources needed for Alternative #2- Partial Winter Drawdown Operation

An operating deck for safe removal and installation of the stoplogs would be needed.

6. Manipulation of Aquatic Resources

Manipulation of Aquatic Resources needed for Repair with Fish Passage

PCB and PAH contaminated sediment and debris were present upstream and adjacent to Estabrook Dam. The sediment and debris were removed during the 2015 Lincoln Park and Milwaukee River Channels Phase II sediment project. Approximately 10,000 cubic yards of contaminated sediment and debris were removed from behind the fixed crest spillway and upstream near the south bank to the Holiday Inn. In addition, trees and other vegetation were removed from the shoreline to facilitate sediment removal, and the shoreline was reshaped and planted per the project design. The project was completed as part of the US EPA Great Lakes Legacy Act, with Milwaukee County and the Department as the non-federal sponsors. The extent of the sediment footprint is about 1.4 acres.

Repair work on the dam spillway, embankments, and icebreakers will take place during drawdown conditions. Temporary diversion structures will be used during dam rehabilitation to direct flow through certain dam gates as other gates are being repaired. The diversion structures will be moved as needed until all gates have been repaired. Facilities and equipment will be located outside of the floodplain.

Southeastern Wisconsin Regional Planning Commission (SEWRPC) completed a detailed analysis of the proposed action on local hydraulic and the floodplain conditions. SEWRPC modeled the Estabrook Dam alternatives in 2014 under multiple flow conditions including mean flow, median flow, 10, 50, 100 and 500-year frequency flow events.

SEWRPC's river modeling takes into account the river cross sections and vegetative conditions of the river's floodplain. Vegetation has developed in some areas of the floodplain since the dam impoundment has been out of service. SEWRPC has adjusted some friction factors to account for this situation where warranted. These areas of recently developed vegetation represent a small fraction of the modeled river system as a whole. In addition, riverbed/bank vegetation would represent an insignificant barrier to floating ice.

(Thank You for your extra scrutiny of this issue!)

SEWRPC also modeled Estabrook Dam with the gates closed to provide Milwaukee County with the technical understanding of the results of river levels under this scenario. Under a 100-year frequency flood with the 10 gates closed, the upstream river levels would exceed a 100-year flood elevation and would worsen the flood conditions. Under this scenario, the river levels would be as much as 1.5 feet greater than the 100-year flood elevation near the dam, and continue to exceed the 100-year flood elevation at West Bender Road. This situation provides potential liability issues for Milwaukee County. The County could staff a dam operator to continually monitor river flows and weather conditions to control the gates, but the possibility remains if the ten gates malfunction due to debris, ice, an electrical power outage or gate mechanical failure, the County could be liable for flood damage to upstream properties.

Manipulation of Aquatic Resources needed for Normal Pool Operation

At the normal water level, the impoundment would be approximately 103 acres and would extend beyond West Silver Spring Drive for an additional 0.9 miles upstream. At flood level, the Milwaukee River would continue to overtop the fixed crest and gated sections of dam structure. During larger floods, the dam would submerge even with all gates open. This means that there would be no discernable difference between water levels upstream and downstream of the dam. The distance from the dam to the upstream end of the impoundment would be about 2.5 miles.

Under normal flow conditions, which assume that the Estabrook Dam gates would be closed, the maximum water depth will be about 8.7 feet near the dam to about 2.4 to 9.1 feet in the upper reach defined as the river segment between the abandoned railroad bridge upstream of Lincoln Park and West Bender Road.

Manipulation of Aquatic Resources needed for Alternative #1 - Full Winter Drawdown Operation

The gates would be opened from September 15th to May 15th of the calendar year and the water levels would be slowly lowered until all gates are open and remain open until May 15th.

Manipulation of Aquatic Resources needed for Alternative #2 - Partial Winter Drawdown Operation

The stoplogs would be removed from September 15th to May 15th of the calendar year, causing the water levels to be lowered 3 feet.

7. **Buildings, Treatment Units, Roads and Other Structures**

Structures needed for repair with fish passage

The proposed action has a small existing building associated with the dam. The dam is a structure that will be rehabilitated. There are no treatment units associated with the dam. Access roads are required to make improvements to the dam. There is an existing access road in Estabrook Park. The access road across the river is on private property and served as access for the sediment removal project and will provide access for the dam project.

The approximately 222-foot long concrete dam and abutments with 10 steel slide gates connects the left (north) bank of the Milwaukee River at Milwaukee County's Estabrook County Park to an island in the center of the river. The County has jurisdiction over the mid-river island. A 562-foot long fixed crest concrete and grouted limestone spillway is located immediately west of the island and connects the island with the right (south) bank of the Milwaukee River. The property on the right bank of the river is privately owned and under the control of Securant Bank & Trust and is listed for sale, and Wheaton Franciscan Services, Inc., where the dam touches the west bank. A series of 28 concrete and steel pylons referred to as "ice breakers" were added upstream of the dam and spillway around 1955 to help protect the structure from debris and ice. The County is in the process of modeling the fish passage design. The design will be modified until it meets all requirements of NR 116.

Structures needed for Normal Pool Operation

No other structures would be needed to operate the normal pool operation.

Structures needed for Alternative #1- Full Winter Drawdown Operation ?

An operating deck for safe removal and installation of the stoplogs may be needed.

Structures needed for Alternative #2- Partial Winter Drawdown Operation ?

An operating deck for safe removal and installation of the stoplogs may be needed.

8. **Emissions and Discharges**

Emissions from repair with fish passage

Temporary air emissions due to construction vehicles may result from the proposed action. No long term emissions or discharges should result from the repair of the dam. Discharges of sediment from disturbing the bed and banks of the river could occur as a result of construction, but should be mitigated through erosion control best management practices. GOOD!

Emissions from Normal Pool Operation

Some discharge of sediment could occur when the gates are opened operated, which could be detrimental to fish, mussels, and other aquatic life. This can be remedied by using past practice of leaving a gate or two open 4" to 6" for additional fish passage & VERY Slow Soils transport.

Emissions from Alternative #2 - Full Winter Drawdown Operation

When the gates would be opened from September 15th to May 15th, discharge of sediment could occur, which could be detrimental to fish, mussels, and other aquatic life. But ~~to some extent~~ MUCH less IF a natural Berm is not permitted to ARISE at the gates. BEST Past practices are the result of years of observations.

Emissions from Alternative #3 - Partial Winter Drawdown Operation

When stoplogs would be removed from September 15th to May 15th, discharge of sediment could occur, which could be detrimental to fish, mussels and other aquatic life.

9. **Identify the maps, plans and other descriptive material attached**

Attachment 1: County map showing the general area of the project

Attachment 2: 2015 Aerial Photo

Attachment 3: Site development plan

Attachment 4: DNR county wetlands map

Attachment 5: Zoning map

10. **Affected Physical Environment**

Topography and Bathymetry

The Estabrook Dam is located in the Milwaukee River basin. A basin report is available at http://dnr.wi.gov/water/basin/milw/milwaukee_801.pdf. The topography of the basin was formed by glacial deposits superimposed on underlying bedrock, and ranges from a high of 1,360 feet above sea level in the Northern Unit of the Kettle Moraine State Forest to 580 feet at the Milwaukee Harbor. The surface slopes downward from the north and west to the south and east. The physiography is typical of rolling ground moraine, although surface drainage networks are generally well connected, leaving relatively few areas of the watershed that are internally drained.

The dam and overflow spillway sit on a limestone ledge in the Milwaukee River. A mile long 200-foot wide, 6-foot deep channel was mined from the limestone ledge in the vicinity of the existing dam in the 1930s to help alleviate flooding in this area along the Milwaukee River. A dam was built on top of the limestone ledge at that time to maintain a pool of water above the dam, which was controlled by operating gates. This pool of water extends approximately 2.5 miles upstream at time of full pool.

Hazardous Materials

The sediment removal project completed in 2015 involved removal of PCB and CPAH contaminated sediment. While hazardous materials are not anticipated with the dam repair, there is a possibility that they may be uncovered during construction. Coordination with the Department will be initiated if this occurs to ensure hazardous materials are handled in accordance with state law.

River Flows and Water Resources

The Milwaukee River Basin consists of six watersheds, containing about 600 miles of perennial streams and 450 miles of intermittent streams draining nearly 900 square miles of land. Most of the stream miles in the basin are considered full fish and aquatic life streams, meaning they are capable of meeting water quality standards and have the ability to support a full range of fish and aquatic life as habitat and water quality allow.

The Estabrook Dam is located within the Milwaukee River South Watershed. This watershed covers about 168 square miles and is located in portions of Ozaukee and Milwaukee Counties. The Milwaukee River main stem enters the watershed west of the Village of Fredonia and flows for about 48 miles before entering the Milwaukee Harbor. Land cover in the watershed is a mix of rural and urban uses. Overall, the watershed is about 33 percent urban, with agriculture (25 percent), grasslands (21 percent), forests (12 percent) and wetlands (6 percent) making up the rest of the major land cover types. Fourteen cities and villages are found in this watershed. As with other watersheds in the basin, the streams in the Milwaukee River South Watershed exhibit a wide range of quality.

Within this urbanized watershed, approximately 15 percent of perennial stream miles have been significantly modified to the extent they have limited ability to sustain diverse biological communities. Many of these streams were straightened, enclosed, or lined with concrete to facilitate water movement downstream to alleviate flooding concerns. From a water quality and biological standpoint, this type of river modification causes wide fluctuations in water levels over short periods of time, increases channel scour, and provides little to no habitat for aquatic life. Milwaukee Metropolitan Sewerage District (MMSD) has implemented major flood water storage and river enhancement activities in Lincoln Creek, South Branch Creek and Indian Creek and other areas.

Approximately 61 miles of streams (10 percent of the total Milwaukee River basin stream miles) do not meet USEPA Clean Water Act water quality standards on a consistent basis and are listed as 303(d) impaired waters. With the exception of one stream in the North Branch Watershed, these lower quality stream miles are located in the most densely populated areas of the basin. Many of these streams were modified by straightening, enclosure, or concrete lining to move water off the land and more quickly downstream. Approximately 2.4 miles of the Milwaukee River near the Estabrook Dam are impaired due to contaminated sediment, point and non-point source pollutant impacts.

The Estabrook Dam is located within the Milwaukee River Estuary Area of Concern (AOC). The Milwaukee Estuary, part of the largest fresh surface water resource in the world (the Great Lakes Ecosystem), was designated an AOC in 1987 by the International Joint Commission because of historical modifications and pollutant loads that contributed toxic contaminants to the AOC and Lake Michigan. Sediments contaminated with PCBs, PAHs, and heavy metals were impairing public benefits such as fish consumption, healthy fisheries, boat access, and wildlife habitat. The Remedial Action Plan was updated in December 2014 by the Department Office of the Great Lakes and recommends fish passage at Estabrook Park. Eleven of a possible 14 beneficial uses identified by the International Joint Commission are impaired or suspected to be impaired for the Milwaukee Estuary AOC.

The floodplain of the Milwaukee River upstream from Estabrook Dam is defined on FEMA Flood Insurance Rate Maps. The 100-year frequency flood is based on Estabrook Dam having all 10 gates open and the stoplogs removed. There is development upstream of the dam and property owners within the floodplain who have mortgages that are required to carry flood insurance.

SEWRPC's river modeling was performed to evaluate the feasible alternatives and to address mean flow, median flow, 10-year, 50-year, 100-year and 500-year frequency events. Water depth under these flow scenarios was addressed to reflect recreational and environmental conditions. Modeling reports are on file with Milwaukee County Parks Department. River flows at Estabrook Dam are summarized as follows:

- Median Flow – 240 cfs
- Mean Flow – 451 cfs
- 10-Year Frequency Flood – 8,790 cfs

- 50-Year Frequency Flood – 12,900 cfs
- 100-Year Frequency Flood – 14,800 cfs
- 500-Year Frequency Flood – 18,810 cfs

Wild and Scenic Rivers

The Milwaukee River is not classified as a Wild and Scenic River.

Air Resources

Air resources will remain unchanged for the proposed action long-term. In the short-term, air impacts would be due to construction and/or demolition activities. Dust and construction equipment exhaust are the primary causes to affect localized air quality during the construction related activities for all feasible alternatives within the construction zone, immediate area, and access roads.

Noise and Odor

Noise will be a short-term issue during construction and/or demolition of the proposed action within the construction area and immediate vicinity. Noise will not be an issue long-term. Odor will not be an issue short-term or long-term.

Soil Resources

Soil resources will not be appreciably affected.

11. Affected Biological Environment

Fish Community

The fish found within the Milwaukee River and Estuary are typical of riverine systems in Wisconsin. The fish survey report reviewed included the river system within Ozaukee and Milwaukee Counties. No specific survey was available for the Estabrook Impoundment. The connection to Lake Michigan has also allowed non-native species such as the Alewife, Sea Lamprey, Round Goby, Brown Trout, Rainbow Trout, Coho Salmon and Chinook Salmon to travel up river. Known or highly expected migrations occur from Lake Michigan and the Milwaukee Estuary up and down the river system. Barriers such as the Estabrook Dam can inhibit this migration. With the dam gates open during part of the year, however, some limited migration is possible. This dam is not a complete barrier because the dam is submerged during a 100-year frequency flood. However, during those high water events, fish migration over or under the gates would be very difficult. The Bridge Street Dam in Grafton was identified by The Department and US Fish & Wildlife Service as the first complete barrier to aquatic invasive species.

Not the Gates.

Some of the best smallmouth habitat on the Milwaukee River and southeast Wisconsin is located in between the Estabrook Dam and Milwaukee Estuary and upstream of the Kletzsch Park Dam. Fish consumption advisories for the Milwaukee River watershed can be found on the website: www.dnr.wi.gov/FCSexternalAdvQry/FishAdvisorySrch.aspx. The Milwaukee River contains a diverse cool and warm water fish community which includes sport and forage fish species. Gamefish and panfish known to be present or suspected upstream and/or downstream of the Estabrook Dam include lake sturgeon, smallmouth and largemouth bass, walleye, muskellunge, northern pike, bluegill, green sunfish, pumpkinseed, rock bass, bluegill, channel catfish, flathead catfish, yellow and black bullhead and yellow perch.

Common forage or non-game species in the Milwaukee River may include fathead minnow, golden shiner, common carp, stoneroller, common shiner, horneyhead chub, white sucker, creek chub, central mud minnow and redhorse. Fall migrations of Lake Michigan run Coho, Chinook salmon and brown trout and fall strains of rainbow trout and spring running strains of rainbow trout occur. The Milwaukee River does have limited suitable habitat for significant reproduction and recruitment of these trout and salmon species. However, rainbow trout are able to spawn and successfully reproduce in Pigeon Creek, which discharges to the Milwaukee River at Thiensville in southern Ozaukee County

Opportunities to restore fish and aquatic life populations and their habitats in the Milwaukee Estuary will remain limited due to land use constraints. In recognition of these limitations, the Department Lake Michigan fish management plans recommend removing or modifying barriers to enable lake and estuary native potamodromous fish to access historic fluvial and wetland spawning and nursery habitats to increase their recruitment to the lake and estuary (WDNR, 2004,

2005a, and 2014; Wawrzyn, 2014). Ecologically and recreationally important species possessing strong spawning migratory behavior that would benefit from removal of barriers include lake sturgeon, northern pike, walleye, smallmouth bass, white and longnose sucker, and four species of Redhorse – the shorthead, golden, silver, and greater redhorse. Barriers to fish movement, among other factors, are identified as limiting the distribution and long-term survivability of state listed species (Lyons, et al., 2000; WDNR, 2005b).

Invasive Species

Since the dam has historically been operated with a winter drawdown and because the river overtops the SPILLWAY during floods, the dam is not considered a complete barrier to aquatic invasive species (AIS). Estabrook Dam is located 6.9 miles upstream of Lake Michigan, but the Department and US Fish and Wildlife Service (USFWS) have identified the Village of Grafton's Bridge Street Dam, located 32 miles upstream of Lake Michigan on the Milwaukee River, as the first complete barrier to fish and AIS. Round goby from Lake Michigan have migrated upstream to the Kletzsch Dam at river mile 10. Round goby have also been observed upstream and immediately downstream of the Thiensville Dam at river mile 20. As of 2015, annual fishery surveys at multiple sites downstream of the Thiensville Dam and upstream of the Thiensville Dam have detected these fish at multiple locations. These results suggest that the presence of Round goby upstream of the Thiensville Dam may be the result of human introductions, possibly by fishing bait releases.

The invasive aquatic and terrestrial plant species present within the project area should not be affected by the dam repair. All construction activities will follow the requirements of Wis. Admin. Code Chapter NR 40, to prevent the spread of invasive plants.

Endangered, Threatened and Special Concern Species

The Natural Heritage Inventory Review is performed based on a Department database inventory of natural heritage communities and plant and animal occurrences of threatened or endangered species that could potentially be located in the project area. The Wisconsin Natural Heritage Working List contains species known or suspected to be rare in the state and natural communities native to Wisconsin. It includes state and federal species legally designated as "Endangered" or "Threatened" as well as species in the state advisory "Special Concern" category. There are no federal listed threatened or endangered, proposed or candidate species located in the project area.

Each species is assigned a single global rank as well as a state rank for each state in which it occurs. Federal ranks are designated by the U.S. Fish and Wildlife Service under the provisions of the Endangered Species Act of 1973. State ranks are assigned by each state's Natural Heritage Program.

Global Element Ranks:

G1 = critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extinction.

G2 = Imperiled globally because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extinction throughout its range.

G3 = either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single state or physiographic region) or because of other factors making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.

G4 = apparently globally secure, though it may be quite rare in parts of its range, especially at the periphery.

G5 = demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

State Element Ranks:

S1 = critically imperiled in Wisconsin because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extirpation from the state.

S2 = imperiled in Wisconsin because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extirpation from the state.

S3 = rare or uncommon in Wisconsin (21 to 100 occurrences).

S4 = apparently secure in Wisconsin, with many occurrences.

S5 = demonstrably secure in Wisconsin and essentially ineradicable under present conditions.

Endangered

The striped shiner is the only state-listed endangered fish species that potentially exists or is known to exist in the Milwaukee River. It is likely to avoid the dam project area once construction activities start.

Striped Shiner (*Luxilus chrysocephalus)*

The striped shiner is ranked with a global element of G5 and a state element rank of S1. These rankings reveal that this species is secure globally but is imperiled in Wisconsin. The S1 or critically imperiled ranking is due to extreme rarity defined as five or fewer occurrences per acre, very few remaining individuals, or some factors make it especially vulnerable to extirpation in Wisconsin. During the mid-1990's, Department crews sampled multiple reaches at various times along the Milwaukee River and identified a single specimen from the river in Ozaukee County. The striped shiner is a warm water species that spawns on clean coarse substrate, larger than coarse sand. The parents guard and ventilate their eggs keeping them clear of silt. They prefer flowing river habitats and their diet is predominantly macroinvertebrates. They are considered intolerant of degraded habitat.

Threatened

The state-listed threatened fish species that potentially exist or are known to exist in the Milwaukee River include the redfin shiner and longear sunfish, both of which would benefit from removal of contaminated sediments and fish passage.

Redfin Shiner (*Lythrurus umbratilis*)

The redfin shiner is classified globally as G5 and has a state-wide ranking of S2. These rankings reveal the redfin shiner is secure globally and is rare in parts of its range. In Wisconsin it is very rare. It has been collected in the Milwaukee River in Milwaukee County very infrequently. This fish is a warm water species that can tolerate more turbid waters. They prefer pool cover in large, low-gradient rivers over boulders, cobble, sand, or stable silt. They spawn by scattering their eggs with adhesive membrane that sticks to coarse clean substrate, submerged alive or dead aquatic plants or recently flooded vegetation, or sometimes on logs or branches. The parents do not build a nest nor do they guard their eggs or ventilate the eggs to keep them clear of silt. They prefer macroinvertebrates for their diet.

Longear Sunfish (*Lepomis megalotis)*

The longear sunfish is ranked globally as a G5 and has a state-wide ranking of S2. These rankings consider the longear sunfish to be secure globally but may be rare in areas of its range. It is very rare in Wisconsin. Milwaukee River Basin populations have declined with few remnant populations in Washington and Fond du Lac Counties. This species prefers clear, shallow, moderately warm, still water of streams, rivers or lakes over rubble, gravel and sand with moderate aquatic vegetation. It spawns from June through early August in large colonies during peak water temperatures in the afternoon. Males build nests in sand or hard mud and defend the surrounding territory. Eggs hatch in three to five days and they become sexually mature in the second or third summer.

Special Concern

One reptile, the Butler's gartersnake, and four state-listed fish species of special concern that potentially exist or are known to exist include the greater redhorse, banded killifish, least darter and lake sturgeon.

Butler's gartersnake (*Thamnophis butleri*)

The Butler's gartersnake is ranked globally as a G4 and has a state-wide ranking of S3. It is limited geographically to the general Milwaukee area. It prefers almost any open-canopy wetland type, except open water, and adjacent open to semi-open canopy upland, including prairies, old fields and weedy vacant lots. They also prefer low-canopy vegetation, although they will occupy habitats with taller vegetation such as reed canary grass. Butler's gartersnake can be active from mid-March through early November, usually emerging shortly after frost-out and remaining active until daytime temperatures fall consistently below 50 degrees Fahrenheit. Breeding usually occurs in April and early May but can occur in fall and live young are born between mid-July and mid-August.

Greater Redhorse (*Moxostoma valenciennesi)*

The greater redhorse is ranked globally as a G4 and has a state-wide ranking of S3. These rankings reveal the greater redhorse is quite rare in parts of its range. The Milwaukee River Basin is one of the most secure populations of greater redhorse in Wisconsin. The greater redhorse is a warm water species. They spawn on clean coarse substrate, gravel-sized and larger. They inhabit large rivers and among the various Redhorse species, they have also adapted to lake environments. Their diet is predominantly macroinvertebrates. Eggs are deposited on rock, rubble or gravel where embryo and larvae develop without parental care. They are considered intolerant of degraded habitat and would benefit from contaminated sediment removal and fish passage.

Banded Killifish (*Fundulus diaphanus)*

The banded killifish is classified globally as G5 and state-wide as S3. The fish is considered to be secure globally but can be rare in areas of the range. In Wisconsin, this fish is considered rare or uncommon. The fish has been identified in the Milwaukee River upstream in Ozaukee County and would benefit from contaminated sediment removal and fish passage.

Least Darter (*Etheostoma microperca)*

The least darter is classified globally as G3 and state-wide as S3. These rankings indicate the fish is either rare or local throughout its range, or found locally in a restricted range. They are rare or uncommon in Wisconsin and would benefit from contaminated sediment removal and fish passage.

Lake Sturgeon (*Acipenser fulvescens)*

Lake sturgeon is classified globally as G3/G4 (vulnerable) and state-wide as S3. Globally, the fish is very rare and local throughout its range. It is rare or uncommon in Wisconsin, but there is a secure population in the Wolf/Fox River basins. Occasionally, a lake sturgeon is observed in the Milwaukee River Estuary. Historically, lake sturgeon were abundant in Lake Michigan, with spawning populations using many of the major tributaries and several shoal areas of the lake. Their rapid decline in Lake Michigan coincided with habitat destruction, degraded water quality and intensive commercial fishing associated with European settlement in the region. Lake sturgeon rehabilitation has become a focus of many Great Lakes restoration efforts. Strategies to increase their population have been identified because lake sturgeon populations are extremely small and believed to be a fraction of their historical abundance. The Department began a stocking program in 2006 using a streamside rearing facility (SRF) on the Milwaukee River. A non-profit organization has agreed to work with the Department on this project by providing a location for rearing and stocking fish. This has enabled the Department to produce ten year-classes of lake sturgeon using this facility. In these 10 years, the Department has stocked 10,735 Lake Sturgeon.

Mussels

A recent mussel study was done of the Milwaukee River in the vicinity of the Estabrook Dam, within the Milwaukee River Greenway. The study made a qualitative analysis of the native mussel populations in four areas of the river. The study identified 11 mussel species within the Milwaukee River Greenway (Elktoe, Spike, Wabash Pigtoe, Plain Pocketbook, Fat Mucket, White Heelsplitter, Fluted-shell, Giant Floater, Creeper, Lilliput and Ellipse). However, 3 of these species (Spike, Lilliput and Ellipse) were identified from shells and no live specimens were found. The Ellipse is classified as a Wisconsin Threatened Species. The Elktoe is classified as a species of Special Concern in the state of Wisconsin and was found alive, in the Milwaukee River Greenway. The species' typical habitat is flowing water with various substrates (silt, mud, sand, gravel, rock) that are stable. Natural or restored shorelines with vegetation, roots, logs and natural structures can create stable sediments and substrates to help the species.

It was noted that very few juveniles and sub-adult mussels were located during the study. This may indicate that the current condition of these areas of the river is not conducive to recent mussel reproduction. This may be due to conditions related to contaminants, low oxygen, silt movement, drought and temperature change.

Mussels are one of the most highly threatened and rapidly declining groups of freshwater organisms. A major factor in the decline of freshwater mussels has been the large-scale impoundment of rivers over the past 75 years. Mussels can live for decades and are vulnerable to habitat disturbance. Mussels are sedentary filter-feeders that may remain in approximately the same location for their entire long life span, so mussels are very limited when their habitat is altered. The effects from altered seasonality of flow and temperature regimes, changed patterns of sediment scour and deposition, changes in particulate organic matter (the food base for mussels) are all important factors that can occur with an impoundment.

IT may be useful to review US Fish & Wildlife testimony in Thiensville 4 yrs. ago. Reps from The State of MICHIGAN STRONGLY supported keeping that DAM in operation w/ a Fish Passage. These Scientists views may be UNTAINTED by State of WISC. Budgetary CONCERNS relative to TOTAL DREDGING of TOXIN PARAMETERS beyond just PCB'S & PAH'S.

AND which also could be most endangered by the extraordinary surges of sediment SLUICING which would occur if either DAM REMOVAL or FULL POND year round options should be effected — as articulated above. LET us All be more AWARE ~~when~~ of unforseen consequences of DAM Removals.

Macroinvertebrates

The Milwaukee River Basin's macroinvertebrate community quality has generally remained in the good-to-very good Hilsenhoff Biotic Index (HBI) rating from 1975 to the present, within most of the watersheds. Nearly 40 percent of the subwatersheds contained sites that ranked in the fair HBI classification which indicates some level of potential impairment to the macroinvertebrate abundance and diversity. Except for the Lincoln Creek subwatershed, most of the subwatersheds throughout the Milwaukee River watershed continue to sustain a fair to good-very good macroinvertebrate community.

No site-specific sampling of macroinvertebrates has been performed within the backwater pool of Estabrook Dam. Upstream sites at Green Tree Road and at Pioneer Road have historically scored, using the Hilsenhoff Biotic Index, as "good". Macroinvertebrate sampling has occurred downstream of the Dam. The closest collection site being approximately 170 meters downstream of the dam that was last sampled in 1999. Three samples scored Fair to Fairly Poor.

Aquatic Plants

Aquatic plants surveys of the Estabrook impoundment are not included as part of the normal lake monitoring program and are not available. Submerged isolated patches of Potamogeton natans and P.pectinatus are present.

Plant Communities

The plant community within and adjacent to the project site (Milwaukee River floodplain) is considered wetland complex and consists of wet meadow and second growth, southern wet to wet-mesic lowland hardwoods. No state or federally endangered or threatened plant species were found.

Wetland and Riparian Zones

Wisconsin Wetland Inventory data indicates that the Milwaukee River South Watershed currently contains more than 6,000 acres of wetlands. Note that wetlands are the most abundant in the northern watersheds, and are least abundant in the urbanized areas.

Wetlands are present within the floodplains of the Milwaukee River. According to the Department mapping tool, the Surface Water Data Viewer (SWDV), the project area includes the following wetland types:

Wetland	WWI Classification Code
Forested wetland	T3K
Emergent wet meadow	E1H

The riparian zones will remain unchanged from previously impounded conditions prior to 2008.

Wildlife

The wildlife in the area of Estabrook Park is typical of southeastern Wisconsin. The grasses, bushes, trees and wetlands along the river combined with Estabrook Park and Lincoln Park provide an environmental corridor and habitat for a variety of wildlife including deer, raccoons, squirrels, mink, rabbits, chipmunks, skunks, foxes, beavers, muskrats, river otters and coyotes. Birds are likewise plentiful and include robins, cardinals, sparrows, crows and grackles. Ducks consist of both locals and migratory species such as mallards, teal and wood ducks. Herons are common along the river and marshes. As part of the Lake Michigan flyway, the corridor experiences diverse migrations of song birds and raptors. Osprey and Bald eagle are occasionally observed fishing the Milwaukee River corridor between upper Ozaukee County and as far downstream of the Estabrook Dam and Hubbard Park in the Village of Shorewood. Information on birds observed at Estabrook Park was compiled by Charles Hagner of the Friends of Estabrook Park and editor of Bird Watching Magazine and is on file with Milwaukee County Parks Department.

Migratory Birds

Migratory birds are found within the project area. The proposed alternatives are not expected to have a significant impact on the migratory birds. The birds may experience some disruption during the construction period, but this impact would be short-term.

12. Affected Cultural Environment

Land Use

The lands on the north bank of the Milwaukee River are located within the City of Milwaukee and are owned by Milwaukee County and are part of Estabrook and Lincoln Parks. The lands along the south bank are located within the City of Glendale and are in commercial ownership west to Port Washington Road and single family residential west of I-43 for approximately four and a half blocks to Lincoln Park. The south bank of the river at the dam is in private ownership and is currently owned by Wheaton Franciscan Services, Inc. No land use changes are anticipated with the dam repair or the operating order.

Recreational Resources

The Milwaukee River is a public waterway. Much of the river corridor is characterized as primary environmental corridor. Recreational use of the river includes fishing, swimming, wading, motor boating, canoeing, kayaking, hiking, bird watching and other paddle sports. Canoe and kayak may be limited in some areas, most notably the upstream limits of the east oxbow with low water depth and the accumulation of debris. The sediment remediation project has significantly increased the effective water depth along Lincoln Creek and especially the west oxbow.

PRIOR TO Leaving — The dam open - The East OXBOW was easily navigated by canoe & ~~kayak~~ light motor boats, NOT anymore. 8 years of use are gone.

Estabrook Park is located on the north bank of the river near Estabrook Dam. The park provides activities including picnic areas, disc-golf, sand volleyball, skate park, soccer fields, softball diamond, tot lot, restrooms, paved multi-use trail, parking areas, dog exercise area and beer garden.

Residents upstream from Estabrook Dam use the river for fishing, canoeing, kayaking and motor boating. There is a City of Glendale public launch that is located at the end of North Apple Blossom Lane in Glendale. It is unimproved with little to no parking suitable for vehicles or trailers at the launch or on the street. There is a new Milwaukee County canoe launch in Estabrook Park.

These were ~~was~~ VIRTUALLY DESTROYED since Oct 2008.

Archaeological/Historical

A report entitled "Phase 1 Archaeological Survey for the Rehabilitation of Estabrook Dam on the Milwaukee River, Milwaukee County, Wisconsin" dated August 2012 and prepared by an archaeological services company, presents the findings from the archaeological survey of the dam area, island and vicinity for access routes in Estabrook Park and along the south side of the river.

The findings from the report are that Estabrook Park contains an extensive distribution of artifacts in the ground. Various park related disturbances have destroyed the archaeological context in some parts of the site, but perhaps not in others. The proposed access road within the park has been regularly used in the past for similar purposes. If the present plan is not changed, there should be no damage to unaffected parts of the archaeological site.

The survey report was submitted to the State Historic Preservation Officer for review and the approval has been received. Eleven Tribal Historic Preservation Officers were contacted for comments concerning the project and only one response was received from the Stockbridge-Munsee Tribe, indicating the project was not within their area of interest. Milwaukee County contacted the State Historic Preservation Office (SHPO) in April 2014, to inquire about the historical significance of Estabrook Dam. The structure dates back to the 1930s. The State Historic Preservation Office indicated the proposed project will not have an adverse effect on the historic properties if the dam is repaired. Since fish passage is proposed for implementation, SHPO will need to be contacted for additional input on the project before the final plans for repair and fish passage are approved. The State Historic Preservation Officer contacted the County on February 13, 2015, to obtain an update on the project. Milwaukee County retained a private consulting firm to perform a study on the historical significance of Estabrook Park including the Estabrook Parkway, the bridges and Estabrook Dam. The study concluded that Estabrook Park, Estabrook Parkway and Estabrook Dam were eligible as a historic place and is recorded in the National Register of Historic Places. Correspondence with SHPO and historical study reports are on file with Milwaukee County Parks Department.

Socio/Economic

Estabrook Dam is located in the Milwaukee River corridor within the highly urbanized City of Milwaukee. Urbanized development with more impervious areas contributes to flooding concerns in the area. Local residents who live adjacent

possible concerns re FUTURE

to the river and impoundment created above the dam have claimed the loss of recreational use, increased flooding, changed aesthetics and loss of property values since the dam gates were opened in 2008.

Milwaukee County population in 2015 was 947,735. There are about 350 properties that are directly adjacent to the Estabrook Dam impoundment. Based on an estimated population from the US Census Bureau of 2.4 people per dwelling, the 350 properties represent an estimated population of about 840 people, which is about 0.09% of the total population of the County.

The general public also benefits from the aesthetics of the Milwaukee River and the nearby Estabrook Park and Lincoln Park. Lincoln Park is upstream from Estabrook Park and primarily residential development in an urban setting surrounds the park. The residential development generally dates back to the 1940s to 1960s. Lincoln Park and Estabrook Park provide recreation resources for the urban population and are popular destinations for biking, hiking, picnics, fishing, kayaking, canoeing, boating, bird watching and enjoying nature in close proximity to populated cities and villages. The Milwaukee River Parkway intersects the river at multiple locations and provides a scenic overlook of the river.

Downstream from Estabrook Dam is a continuation of Estabrook Park, and adjacent urban development including residential, commercial and industrial development. The Village of Shorewood is to the east of Estabrook Park, the City of Milwaukee is to the south of Estabrook Park and the City of Glendale is to the north of Estabrook Park. The Milwaukee River includes a green space along the river corridor with a hiking/bike trail along parts of the river and plans are underway to extend the hiking/bike trail in both directions from Estabrook Park. The Oak Leaf Trail, owned and operated by Milwaukee County, runs through Estabrook Park.

There is potential for expanded redevelopment upstream and downstream from Estabrook Dam in properly zoned areas. Areas downstream from Estabrook Dam include parkland and some commercial, industrial and residential properties. Since the former North Avenue Dam was removed from the Milwaukee River downstream of Estabrook Dam, the surrounding area has seen substantial redevelopment along the river, including condos, restaurants and other businesses in the vicinity of the former North Avenue Dam.

13. Other Affected Special Resources

Other Special Resources (State Natural Areas, prime agricultural lands)

There are no state natural areas, prime or unique agricultural lands, wilderness, forests or Native American Religious Concerns associated with this project.

Areas of Critical Environmental Concerns

The project area does include one area of environmental concern which is the sediment removal project from Lincoln Park to Estabrook Dam. This USEPA project involves the Department and Milwaukee County and is separate from the Estabrook Dam EIS. (Good... because concerns re ecotoxbow soft silt contaminants other Than PCB's may have been disregarded. Approx. 100,000 tons averaging 5' in depth were disturbed by this project. Depending on future stream velocities here some questions may arise.)

14. Physical Effects

Impacts of repair with fish passage

The dam repairs will provide dam structure stability and public safety and improve dam operations. The impoundment could be drawn down in the future for inspections, maintenance, repairs and invasive species management. New slope protection both upstream and downstream of the gated dam structure will stabilize and protect the embankment. MY GOD! Structural/mechanical improvements would be necessary such as addition of an aerator or a glycol antifreeze system to reduce freezing of the 6 gates to minimize ice buildup. The upstream ice breakers serve a function to minimize large ice flows from damaging the gates, but the potential exists for a buildup of ice against these gates which can result in structural damage during early spring ice out. Refer to Austria's wine scandal & human consumption of ethylene glycol in the 1970's. Historical use failed & believe in 1937-38.

During the construction at the dam, some dust will result, but will be short-term and primarily limited to the vicinity of the construction zone. Short-term noise can be expected during construction activities, but long-term noise issues are not expected. Soil resources will not be appreciably affected with construction of the fish passage, but materials such as gravel, sand and stone will be needed for construction and will be obtained from a local quarry.

Any danger of leaks? Designs tested in like situations?

Impacts of Normal Pool Operation

With normal water levels, the impoundment will extend approximately 2.5 miles upstream of Estabrook Dam year-round.

There may be potential ice damage concerns by maintaining a normal water level through the winter. Issues relate to the gates freezing in winter and becoming inoperable, or to ice damage. The potential exists for structural damage to the 6 gates. The design ice loading on these steel gates is 5,000 pounds per square foot, which reflects the power and force of these ice flows. Structural/mechanical improvements would be necessary such as addition of an aerator or a glycol antifreeze system to reduce freezing of the gates at the six gates to minimize ice buildup.

SEWRPC modeled the river based on the 100-year flood and the dam gates open which resulted in determining the 100-year flood elevations from the dam and extending to approximately West Bender Road. SEWRPC has also modelled the river based on the 100-year flood and the dam gates being closed to determine the effect on flood elevations. If the 6 gates are closed during a 100-year frequency flood, the 100-year flood elevations will be exceeded and can contribute to upstream flooding. This situation has potential liability to the County due to flooding and associated property damage. If Milwaukee County maintains normal water levels by progressively opening the gates during flooding, there should be no additional contribution to upstream flooding. During larger flood events the dam will submerge and flooding could still occur upstream even with all the gates opened.

A buildup of sediment in the impoundment would be increased with the elimination of winter drawdowns as a long-term function of the dam. Some sediment will travel downstream during the periods that the gates are open.

Impacts of Alternative #1 - Full Winter Drawdown Operation

The gates would be fully opened during winter drawdown and sediment would travel downstream as a result. The potential for ice damage to the gates of the dam would be reduced with winter drawdown. Bank erosion within the impoundment would likely increase. The manipulated water levels would not allow for the establishment of bank stabilizing vegetation as drawdown would expose these slopes to erosion from water, wind and ice.

Impacts of Alternative #2 - Partial Winter Drawdown Operation

Stoplogs would be removed during partial winter drawdown. Some sediment would travel downstream when the stoplogs are removed. The potential for ice damage to the gates of the dam would be reduced with the drawdown. Bank erosion within the impoundment may increase, as manipulated water levels would not allow for the establishment of bank stabilizing vegetation.

15. Biological Effects

Impacts of Repair with fish passage

The construction of a fish passage structure should increase the diversity and population of fish upstream of the dam and create a more natural riverine environment through the passage. The fish passage will increase the probability of developing sustainable populations of lake sturgeon and walleye within the watershed. Recreational fishing opportunities exist and would be enhanced with the implementation of the fish passage structure.

The fish passage structure will contribute to creating self-sustaining populations of native Lake Michigan and Milwaukee estuary species by enabling potamodromous lithophilic and phytophilic spawning fish to access historic spawning and nursery habitats including game fish (walleye, northern pike, smallmouth bass), and non-game fishes (lake sturgeon, white and longnose sucker, and shorthead, silver, golden and greater redhorses). Barriers to fish movement have been identified as a limiting factor to the distribution and long-term survivability of state listed species in the Milwaukee AOC including the endangered striped shiner, threatened redfin shiner and longear sunfish, and special concern lake sturgeon (which is on the USFWS Region 3 Conservation Priority List as a Rare/Declining species).

It is estimated that the implementation of fish passage at the dam would make 25 river miles, 29 miles of tributary and 2,400 acres of wetland spawning and nursery habitat accessible to native Great Lakes fish. Spawning habitat in the Milwaukee River downstream of Estabrook Dam is limited to about 1 acre, so the fish passage would substantially increase access to the spawning and nursery habitat which would in turn benefit fish populations.

Enabling fish passage and access to historic spawning and nursery habitats is a major focus of federal and state management agencies for restoration of Lake Michigan lake sturgeon populations (http://dnr.wi.gov/topic/fishing/lakemichigan/lakesturgeon.html, http://www.fws.gov/midwest/sturgeon/index.html). The

Milwaukee River is one of two Wisconsin rivers with ongoing lake sturgeon rearing facilities. At these facilities, fertilized eggs from Wolf River parents are developed, imprinted and released to the Milwaukee Estuary and to Lake Michigan to mature and ultimately return to their natal stream for spawning. These fish must pass the Estabrook Dam in order to reach segments of the river in Ozaukee County that contain optimal spawning habitat such as large cobble and boulder-sized bedrock. The TSS quality & quantity on the MKE River - highest watershed human population & WISC. roadway density ... Makes the CHOICE of this river for STURGEON STOCKING of possibly FUTURE SCRUTINY ~ Juveniles must have unobstructed return access from the estuary and Lake Michigan for feeding and growth. Juvenile lake sturgeons from previous stockings have been captured in the Milwaukee River during false spawning runs and elsewhere in the estuary. The Department anticipates previously stocked and imprinted fingerlings to mature and begin spawning runs around 2020. Lake sturgeon is a state listed special concern species and is on the USFWS Region 3 Conservation Priority List (WDNR, 2005).

Construction could cause disruption to the some native fish species spawning if these fish are present at Estabrook Dam and spawning during the time of construction. It is probable that fish will temporarily relocate to spawn in another nearby area of suitable habitat. Impacts to fish spawning due to construction activities can be minimized by limiting the time of the year that construction takes place.

The fish passage structure will allow for migration and movements of mussels' host fish. The glochidia (mussel larvae) attach themselves to a host fish, which will then carry the larvae until they form into juveniles and drop off. Since an integral part of the mussel life cycle is the host fish, allowing for fish migration will have a positive effect on mussels by expanding upstream diversity and populations.

Various construction activities within the river can have an impact on the mussel populations. Dredging, dam operations and associated fluctuations in water levels, dam removal, shoreline reconstruction, sediment removal and other activities can negatively impact existing mussel beds and populations. Restoration of mussel beds should be considered as part of a mitigation plan after such activities. Additionally, translocation and repatriation of mussel species also can be considered.

An integral part of the mussel life cycle is the host fish. Dams affect the dispersion and life cycle of mussels by inhibiting the movement and migration of the host fish species. Dams can create a barrier for the host fish preventing longitudinal migration which can adversely affect the dispersion and distribution of mussel species throughout the river system. The fish passage structure being added to the dam will help to alleviate the restrictions on the distribution of mussels in the Milwaukee River both upstream and downstream of the dam.

During construction/demolition work, wildlife, fish and other aquatic species and their habitat will be temporarily disrupted until the work is completed. Snapping turtles, painted turtles, bullfrogs and green frogs are expected to inhabit the area. The fish passage construction could also result in minor filling of wetlands along the bank associated with installation of riprap. This would be limited to less than 10,000 square feet of wetland. Care should be provided during design where riprap is proposed to minimize the spaces between the rocks that could potentially trap turtles, frogs and other species. The spaces between large rocks will be filled in with smaller stone where possible.

Migratory birds may experience some disruption during the construction period, but this impact will be short-term. Long-term impacts to migratory birds or other bird species are not expected.

Impacts of Normal Pool Operation

With normal water level operation, the fish passage would be functional year-round and would contribute to creating self-sustaining populations of native Lake Michigan and Milwaukee estuary species by enabling potamodromous lithophilic and phytophilic spawning fish to access historic spawning and nursery habitats including game fish (walleye, northern pike, smallmouth bass) and non-game fish (lake sturgeon, white and longnose sucker, and shorthead, silver, golden and greater redhorses).

Since the fish passage would allow for fish to travel year-round, it would also enhance the dispersal of mussel species and increasing mussel diversity and populations in areas of suitable habitat upstream from the dam. However, siltation and the buildup of sediment within the impoundment can also affect mussels by the release of sediment when the dam gates are opened, which could adversely affect mussels downstream from the dam.

STREAM VELOCITY SLOWS; BUT DEEPER WATER IS COOLER, WITHOUT data - This statement can only be INCONCLUSIVE.

Maintaining water levels year round may increase water temperatures. This may also result in lower dissolved oxygen content, affecting some fish species and possibly altering the fish community make-up of the impoundment. Carp populations may climb, as they can tolerate higher temperatures and low dissolved oxygen. Carp may degrade water

quality by uprooting aquatic vegetation and stirring up sediment. These turbid conditions may adversely affect pool aesthetics and aquatic life. Algae and blue-green algal communities within the impoundment may occasionally reach nuisance conditions.

Operating at normal pool would tend to create and maintain more aquatic plant communities. Wetlands within the floodplain would have a deeper water depth year round, due to the lack of a winter drawdown.

Impacts of Alternative #1 - Full Winter Drawdown Operation

The partial winter drawdown would make the installed fish passage unusable. Fish and other aquatic organisms could move freely downstream and upstream through the opened gates during the winter drawdown, however. Since the drawdown in 2008, the dam has functioned in this run off the river manner. In a manner similar to normal operation with fish passage, those fish that remain in the system should find improved conditions for spawning, feeding and growing conditions leading to an expected overall improvement in fish populations.

Erosion and scour can be caused by a release of water through the gates and can result in an altered distribution of sediment. Sudden releases of water by opening dam gates scours the river channel downstream and within the impoundment dislodging aquatic organisms. The exposed floor of the impoundment can undergo freeze and desiccation cycles which further impacts aquatic life and wildlife along the corridor. Closing the gates may also reduce downstream flows and desiccate the river channel and aquatic life.

A discharge that is either high during the wrong season or high too frequently can have distressing impacts on mussels. High water and high flows can displace juveniles before they can burrow or attach to substrate, resulting in a high mortality rate. The increased flow can produce a rise in erosion and subsequent deposition of material downstream both of which may result in loss of mussel habitat. Increased sediment deposition can clog mussel siphons and gills which interfere with feeding and reproduction.

Siltation and the buildup of sediment within the impoundment can result in a sudden release of sediment when the dam gates are periodically opened. This can adversely affect mussels downstream from the dam. Areas in the impoundment may also be dewatered as a result of the drawdown, leaving muddy flats and mussels stranded, leading to desiccation or predation. Mussels can move to deeper waters if the drawdown is slow enough. Seasonal drawdowns must be managed to be protective of mussels and other aquatic life both in the impoundment and downstream. The Department code limits lowering the impoundment levels to a maximum of 6 inches per day to be protective of aquatic life.

Wetlands within the floodplain would have a lower water depth during the draw down from mid-September to mid-May. This may change wetland hydrology and possibly wetland plant communities as plant species needing to be submerged in water year round may not be able to survive. Increased bank erosion due to lack of established bank-stabilizing vegetation may occur. Increased sediment from erosion may have an impact on aquatic life within the impoundment and downstream.

Impacts of Alternative #2 - Partial Winter Drawdown Operation

Since the gates would be closed during the partial winter drawdown, fish would be limited in their movement. The partial winter drawdown would make the installed fish passage unusable and fish could not to swim through the closed gated sections. This alternative would have negative impacts on fish and aquatic organisms as they would not be able move freely though the system from September 15th to May 15th. During this time there are substantial spawning runs from a variety of fish species including Chinook and Coho salmon, brown and rainbow trout, walleye, white sucker and Lake Sturgeon.

An integral part of the mussel life cycle is the host fish. If host fish movements were inhibited by the partial winter drawdown, dispersal and distribution of mussels would also be restricted throughout the river system.

A discharge from the dam that is too low during the wrong season or abnormally low for extended periods can also have adverse impacts on mussels. Significant periods of low flow below an impoundment can result in stranding mussels. Mortality in these situations is usually due to desiccation, asphyxiation, predation and thermal stress as mussels lack the ability to regulate their body temperature. Mussels can also be stranded by dewatering upstream from the dam during drawdowns. Mussels move very slowly and have limited capabilities to adapt to rapid changes in impoundment levels which can be detrimental to mussels and should be avoided. If stranding does not result in mortality, the associated physiological stress reduces mussel condition and ultimately reproductive potential. Mussels in shallow isolated pools are also exposed to hypoxia from algal production and ammonia pulses from decaying organics, both of which have a

detrimental effect on mussel populations and reproductive potential as a whole. Seasonal drawdowns must be managed to be protective of mussels and other aquatic life both downstream of the dam and in the impoundment.

AGAIN, WE MUST REITERATE, IN over 70 yrs of past operation, The MUSSELS PERSIST.

The partial winter drawdown could have a detrimental impact to aquatic life unless the drawdown was reduced to a level that would not be harmful to aquatic life. The Department code limits lowering the impoundment levels to a maximum of six inches per day to be protective to the aquatic life. Removing the stoplogs at the dam would lower the water level by three feet and would still provide sufficient water for the mussels and other aquatic life to function. This water level would be significantly higher than a complete drawdown with all six gates open.

What happened at North Ave?

There may be an increase in bank erosion within the impoundment due to the inability of bank stabilizing vegetation to establish within the partial drawdown elevation. Wetlands within the floodplain would have a deeper water depth with the impoundment from mid-September to mid-May, but may experience stress similar to the full drawdown impacts, but on a reduced scale.

"DURING THE WINTER?"

16. Cultural Effects

Impacts of Repair with fish passage

The bulk of the work for the dam rehabilitation will occur in Estabrook Park, the central river island and on the south bank of the river owned by Wheaton Franciscan Services, Inc. Easements to access property not owned by the County have been obtained from those owners, but may need to be updated prior to construction.

The addition of the fish passage may or may not be considered by SHPO as a significant change. Based on SHPO conclusions, the construction of fish passage may require a Historical American Engineering Record (HAER) study and additional steps may be necessary prior to construction. The additional steps taken on other dam projects in which the structure was listed on the National Register of Historic Places include providing signage or a plaque recognizing the dam as a historically significant structure. Past structure design documents may also need to be recorded to serve as a historic record for the structure.

Since the fish passage structure will allow for migration of fish throughout the river year-round, this will have a positive impact on fishing opportunities in the area.

Impacts of Normal Pool Operation

With a normal water level operation, the public would be able to use the impoundment year-round without the attention to low or high river flow affecting their recreational use.

Impacts of Alternative #1 - Full Winter Drawdown Operation

Deeper draft motorized boating would be the most impacted by the drawdown of the impoundment during early fall base- and low-flow river conditions.

and elevated SAND BARS

Winter

Recreation may be impacted if mud flats develop in the impoundment area. These flats may act as a large settling basin where sediment would collect. Mud flats are common in rivers and can be created by the natural processes such as deposition in the river, but the impoundment may promote and accelerate the settling of sediment in the pool.

thereby WE NOTE The WIDTH of the Central channel + The LOW SLOPE SLOWS The Stream, increasing sedimentation. This and reducing deposition at the dam gate to near ZERO. TO Those who may have hoped for major SLUICING of sediments during the ordered 2 yr. drawdown, (as occurred during the N. Ave DRAWDOWN) These concomitants MAY have been disappointing.

Impacts of Alternative #2 - Partial Winter Drawdown Operation

Deeper draft motorized boating would be the most impacted by the drawdown of the impoundment, during early fall base- and low-flow river conditions.

17. Social/Economic Effects (including ethnic and cultural groups, and zoning if applicable

No ethnic group or cultural group will be ~~significantly~~ ADVERSELY affected by the repair with fish passage operated at normal pool, full winter drawdown or partial winter drawdown. The Department does not anticipate economic impact to property values due to the repair of the dam with fish passage because the water level for the river will be established at levels near historic water levels, prior to the gates being opened in 2009. There is potential for increased economic impact from sport fishing due to the positive impact on fishing opportunities that the fish passage will provide.

18. Other Special Resources Effects

ON The other hand, if repair + fish passage are not installed All locals lacking transportation, ~~to~~ due to or other limiting factors, financial, free time, physical incapacities would be deprived of this valuable RECREATIONAL asset - AND this is a Major consideration for the HUMAN ENVIRONMENT, Let us not minimize this. It is The REASON FOR THE FIERCE RESISTANCE TO REMOVAL.

No other Special Resources will be impacted by the repair with fish passage operated at normal pool, full winter drawdown or partial winter drawdown.

19. Summary of Adverse Impacts that Cannot be Avoided

Short-term impacts include dust, noise and traffic congestion during repair of the dam. A buildup of sediment in the impoundment can be expected over the long-term function of the dam. Some sediment will travel downstream during the period when the gates are open. Best management practices for stormwater will be used during the construction activities.

Wildlife may be displaced to other available habitat in the Milwaukee River environmental corridor during construction and when the impoundment is filled. Aquatic life will be temporarily disrupted during construction at the dam. Aquatic habitat may change with a deeper pool and a variable sediment distribution.

Mussels downstream may be impacted if the dam gates are intermittently opened and sediment is flushed. Mussels upstream may be impacted as sediment accumulates in the impoundment.

Operating at normal pool year-round may create more aquatic plant communities to replace the terrestrial plant communities.

Wetlands along the south bank of river immediately upstream of Estabrook Dam will be impacted short-term during the construction of the proposed action.

20. Short and Long-Term Environmental Effects

Effects of Repair with Fish Passage

Short-term impacts include dust, noise and traffic congestion during repair to the dam and construction of the fish passage. Best management practices for stormwater will be used during the construction activities. Long-term effects of repairing the dam with fish passage include dam stability, fish movement allowed both upstream and downstream of the dam, and maintenance of an upstream pool for recreation.

Effects of Normal Pool Operation

A buildup of sediment in the impoundment could be expected over the long-term function of the dam when operated at normal pool year-round. Some sediment would travel downstream during the period when the gates are periodically opened. There is risk of ice damage to the dam and shoreline during the winter with this alternative. Optimal fish movement would be facilitated with this alternative because there would be water flowing over the fish passage structure at all times of the year.

Effects of Alternative #1 - Full Winter Drawdown Operation

Short-term effects of this alternative include annual releases of sediment to the downstream portion of the river, which could have effects of fish, mussels and other aquatic species. The lowered pool would cause areas upstream from the dam to be dewatered also affecting aquatic species. Potential long-term effects include less sediment buildup behind the dam, and although the fish passage design will not function with the lowered water elevation; fish would be able to migrate through the open gates during these times of the year.

Effects of Alternative #2 - Partial Winter Drawdown Operation

Some sediment would travel downstream when the gates are opened. Potential long-term effects include less sediment buildup behind the dam, but the fish passage structure would not function as well with the lower water elevation and fish would not be able to move unless the fish passage was kept submerged by means of pumping water over it.

21. Cumulative Impacts

Impacts of Repair with Fish Passage

Cumulative impacts of this alternative include a greatly increased area of aquatic habitat available to fish and other aquatic life.

Impacts of Normal Pool Operation

There are no cumulative impacts of this alternative.

Impacts of Alternative #1 - Full Winter Drawdown Operation

There are no cumulative impacts of this alternative.

Impacts of Alternative #2 - Partial Winter Drawdown Operation

The movement of fish and other aquatic species may be more restricted with this alternative.

22. Risk

Risk of Repair with Fish Passage

The risk with the repair to fish passage is that additional aquatic invasive species might pass through the structure that might not otherwise have been able to pass through the open gates or under flood conditions. Construction-related risks include safety concerns and hazardous material spills during construction.

Risk of Normal Pool Operation

The risk associated with normal pool operation would be increased flood elevations exceeding the current 100-year flood levels when the dam gates are closed. The Operation Plan calls for the gates to be closed during summer but still passing at least minimum flow downstream at all times. If the Milwaukee River experienced a 100-year flood discharge during summer, closed gates at Estabrook Dam would result in flood elevations upstream of the dam in excess of the 100-year flood elevations determined with the assumption that the spillway gates are open. This situation provides a liability risk to Milwaukee County. Milwaukee County will have a dam operator available to monitor weather, river flows and gate position. The dam operator would maintain a pool level based on the fixed crest spillway elevation. When water levels increase appreciably, the operator would open gates to pass the increased flow. If the gates malfunctioned due to a power outage or gate mechanical issue and all 6 gates were closed during the flood event, Milwaukee County would be at risk of causing 100-year flood elevations upstream from the dam during a flood flow event only somewhat greater than a 10-year event. Manual overrides on the gates will be provided, but operation of the gates manually could be a challenge during flood conditions. There is also a risk of ice damaging the gates of the dam in the winter.

Risk of Alternative #1 - Full Winter Drawdown Operation

There is a safety risk concerned with removing the stoplogs without an operating deck.

Risk of Alternative #2 - Partial Winter Drawdown Operation

There is a safety risk concerned with removing the stoplogs without an operating deck.

23. Precedent

The proposed action to repair the dam with a fish passage structure has been successfully implemented at other locations, the nearest being the Milwaukee River in Thiensville. One change for Milwaukee County would be the requirement that the County's dam gate operator monitor river levels, weather and gate positions to take action before a flood event occurs to avoid the gates being closed during a significant flood.

24. Controversy over Environmental Effects

The public and regulatory agencies have the benefit of observing the potential environmental effects of the proposed action because the gates have been open since 2009, following decades of use of the dam and the impoundment. The

Loss of
public is aware of the recreational opportunities and aesthetics of the impoundment. The sediment buildup upstream of the dam is likewise well documented.

Supporters of removal and supporters of repair have been very vocal. Supporters of the dam prefer the impoundment for recreation, especially boating. This group also prefers the aesthetics of an impoundment resulting in a shallow lake setting. Supporters of dam removal prefer a free flowing natural river.

Based upon the agenda of an activist organization WaterKeepers, INC. and nourished by a temporary 4-500% increase IN INVOICES also a boon flood plane insurance to local riparians only after 7½ yrs. of drawdown conditions during which FEMA conducted no new SURVEY of This area. (This smells a little Fishy, wdn't you suspect?) This introject of FEAR resulted in a condition of DURESS ripe for signatures for removal. The sad truth is, regardless of whether removal would have occurred or NOT, NO IMPACT on lowering those INVOICES. ~~Could in any way be reasonably be effected, as the rationale for signing~~ these signatures could have.

Lastly, re ~~to~~ the inclusion of the Wetland Maps is of interest and possible concern. So long as designated Wetlands has not been altered since the Oct. 2008 drawdown, I have no comment.

Thank You,

Richard A. Cahl

414-351-5142

Dick A. Yahr
5270 N Milwaukee River
Milwaukee, WI 53209-5140

KERKMAN & DUNN
A Partnership of Limited Liability Corporations

Suite 300
757 N. Broadway
Milwaukee, WI 53202-3645
Phone: 414.277.8200
Fax: 414.277.0100

March 25, 2016

Via email

Tanya Lourigan
Wisconsin Department of Natural Resources
Water Management Engineer
3911 Fish Hatchery Road
Fitchburg, WI 53711

Re: Estabrook Dam DNR Oversight

Dear Ms. Lourigan:

I am counsel for Milwaukee Riverkeeper in the court action regarding the nuisance abatement for the Estabrook Dam. As part of the public comment period for the Environmental Impact Statement ("EIS"), I am submitting this correspondence describing Riverkeeper's position on applicable law governing the County and the Department's actions to provide for a potential abatement of the nuisance through repair of the Dam.

1. Background and status of court case.

The Department issued several orders to the County over many years to address the problems with the Dam. The Department did not enforce its orders. Pursuant to Wis. Stats. § 31.25 and § 30.294, Riverkeeper brought a court action to require the County to address the problems with the Dam. In May 2012, the Court ordered that the Dam was a nuisance. In September 2012, the Court ordered that the County provide detailed information regarding how it would be abating the nuisance (through repair or removal). *See Copy of September 2012 order attached as Exhibit A.*

Much time has passed and the current public position of the County Board is apparently that the Dam will be repaired. That has triggered multiple levels of review at the County and within DNR. While the EIS is ostensibly about setting water levels and informing future operations of the Dam, it is Riverkeeper's positon that the current proposal for repair of the Dam being pursued by the County is not in accordance with the statutes governing repair and maintenance of Dams. The Department should be aware of the following:

2. *Jurisdiction of the Department.*

Chs. 30 and 31 stats. govern all actions within navigable waters relative to dam construction maintenance and repair. The Department's jurisdiction is broad. Wis. Stats. § 31.02 provides:

> (2) The department may investigate and determine all reasonable methods of construction, operation, maintenance, and equipment for any dam so as to conserve and protect all public rights in navigable waters and so as to protect life, health and property; and *the construction, operation, maintenance and equipment, or any or all thereof, of dams in navigable waters shall be subject to the supervision of the department and to the orders and regulations of the department made or promulgated under this chapter.*

Wis. Stats. § 31.02 (2) (emphasis added)

Wis. Stats. § 31.25 and 31.253 expressly permit and require the Department to abate dams that are nuisances including by ordering them to be removed. Similarly, repair and reconstruction of existing dams is subject to Department oversight and approval.

Wis. Stats. § 31.38 applies to municipally owned dams. That section requires as follows:

> (1) Every municipality may, subject to this chapter, authorize the acquisition, construction, maintenance or ***repair*** of dams across any lake or stream adjoining or within the limits of such municipality, and may locate such dam within or without such limits.
>
> (2) Whenever it is deemed necessary to acquire, construct, maintain or ***repair*** any such dam, ***a plan therefor, with specifications and cost estimates, shall be prepared and presented to the governing body of the municipality for adoption.*** Cost estimates may include the estimated cost of maintenance for a period of years. When adopted by the governing body, the plan shall, where required, be submitted to the department or proper officer of the United States for approval. No work shall be done in pursuance of such plan until it has been so approved.

Under these provisions, the County must present a detailed plan to the County Board and obtain approval from the Board to repair an existing dam. These provisions do not apply only to newly constructed dams, as can be seen by the plain language of the statute.

Secondly, the approved plan for repair, with specifications and cost estimates shall be submitted to the Department. The Department's orders were what established that the Estabrook dam was a nuisance in the first instance. Obviously, the Department must

review any proposed repair plan to review and determine whether it will abate the public nuisance.

Thirdly, to the extent the Army Corps of Engineers has jurisdiction over the activities in the River related to the proposed repair and fish passage, that agency must also review and approve the proposed plans for repair.

To Riverkeeper's knowledge, the County has not complied with these provisions. There is no plan for repair with specifications and costs estimates that the County Board has been able to review and vote on. As of the date of this letter, plans have not been finalized pertaining to the proposed fish passage element of the repair and full plans on repairs to the main structure are still in progress. Since the Court's 2012 orders, the County Board has never passed a resolution declaring its intent to repair the Dam nor determining that doing so is in the public interest. There has been no debate at the County Board regarding repair or removal options, nor have the costs associated with repair and ongoing operation and maintenance been addressed. The County's position on its policy (currently repair) has been articulated, to the extent it has been, through correspondence from the County Corporation Counsel to the Circuit Court. This current position appears to be based on the Corporation Counsel's interpretations of a series of mostly budgetary decisions and votes over the past 18 months.

Merely because the County owns an existing dam does not mean it has continuing unfettered permission to operate such a dam. That interpretation of the statutes would fly in the face of the Department's jurisdiction and duty to govern and control the use of navigable waters in the public interest and consistent with the public trust doctrine. The language of Wis. Stats. § 31.38 expressly requires Department oversite of a proposed repair to a municipal dam. The Department makes this requirement explicit on its website, including a form application covering "Dam Repair or Reconstruction." *See Copy attached at Exhibit B.*

It is Riverkeeper's view that process called for by Wis. Stats. § 31.38 must be followed prior to any detailed review or issuance of operational permits or orders under ch. 31 or other statutory programs. It is basic common sense that the Department would expect a municipality to have actually reviewed, voted on and approved a proposed repair before moving forward with detailed operational orders and planning. Based on our review of the record, the County Board has never been presented a complete and detailed plan for repair with specifications and cost estimates and been required to vote directly on that plan for repair of the Estabrook dam as called for by the Court's order and under Wis. Stats. § 31.38. A resolution was prepared by County staff in October 2014 and included a recommendation of ***removal***. *See Copy attached as Exhibit C.* That resolution was tabled and not voted upon. However, no alternative resolution affirmatively setting repair as the policy and approving a specific plan for that repair has been approved.

Wis. Stats. § 31.38 also requires that the County provide funding for a dam repair or reconstruction through a special assessment against the benefitted properties:

> The municipality shall proceed in accordance with s. 66.0703 to make special assessments to property on account of benefits resulting to the property from the improvement mentioned in sub. (2) or from the acquisition and maintenance of a dam. If the excess of benefits over damages accruing to property within the assessment district is not sufficient to pay the cost of the improvement, the municipality may pay the balance, either out of its general fund or out of any special fund created for that purpose. The municipality may issue its negotiable bonds, as provided in ch. 67, to pay for such improvement. The department upon request of a municipality shall assist in engineering, surveying and determination of charges necessary in establishing special assessment districts under this section, cost of which shall be advanced by the requesting municipality and later charged against the various parcels of the special assessment district in direct proportion to the assessed benefits of each parcel in the district.

The County Board has not assessed the private landowners for the costs necessary to reconstruct and repair the Dam. It should be noted that repair of the Dam is not needed to provide public access to the River and will at best confer only a small recreational benefit to upstream users/private property owners. Dam removal will lower flood risk in Lincoln Creek and elsewhere for over 300 homes, most of those in economically challenged neighborhoods. There is only one public access to the proposed impoundment and it has no facility for parking for cars trailers or boats.

3. Proof of Ability to Maintain Dams

In addition to being required to have a concrete plan for repair of a dam along with costs estimates for repair, a municipality must also demonstrate the financial ability to maintain the repaired dam into the future for at least 10 years. This is specifically required under Wis. Stats. § 31.14, which provides as follows:

> Except as provided in sub. (3), a permit shall not be granted under s. 31.06, 31.08 or 31.13:
> (a) Unless the applicant furnishes to the department proof of ability to operate and maintain the dam in good condition, either by the creation of a special assessment district under ss. 31.38 and 66.0703, or by any other means which in the department's judgment will give reasonable assurance that the dam will be maintained for a reasonable period of time not less than 10 years; or

In reviewing certain correspondence, it appears that the Department does not believe it should be involved in overseeing whether the County has the financial ability and wherewithal to not only reconstruct the dam but to maintain it for the next 10 years. This is confusing because Ch. 31 is a statute that both empowers and obligates the Department to oversee dam repair and operation for the public good. The Department has

the duty to enforce the statutes and the provisions cited above in the first instance. Based on the history of the County's efforts and the Department's review to date, it does not appear that the Department is requiring the County to follow the simple and plain language of the statutes.

This is particularly odd because the very reason that the dam became a nuisance (and thus the very reason that the Department ordered the nuisance to be abated) was because the County had not been demonstrating the wherewithal and diligence in maintaining the Dam for over a decade. The County has failed to address the Department's repairs orders on this structure dating back to 1995. In addition, the Department is currently also enforcing repair or abandon orders against the other two County-owned Dams, at Kletsch Park and Mill Road. These dams are in disrepair because of neglect of maintenance. The ability of the County to reliably maintain a new Estabook Dam including paying for that maintenance and ongoing repair is an issue that the Department is empowered to and has a duty to consider in approving a repair plan such as that proposed for the Dam.

As the Department's own guidance explains in discussing how the Department should require financial assurance:

> State/Local government – Experience with state/local government has been mixed. Often state and local units of government don't have the money or personnel to effectively operate a dam. The ability of these governments to finance dam operation and maintenance through taxes is unlikely to improve in the future, especially considering levy limits and the general feelings of taxpayers.

See DNR Waterway and Wetland Handbook, Ch 140 p.40 excerpt attached as Exhibit D.

The Department should require a strong demonstration by the County that it has the technical and financial wherewithal to repair and operate the newly reconstructed dam before approving any County proposal and repair plan or other operational order.

4. Use of Public Funds

The Riverkeeper is seeking court review of the County's current plan to fund the repair of the dam from public grants, general tax revenues, and issuance of municipal bonds. The plain language of the statutes cited above require that a municipality "shall" generate funds to cover costs of repair by imposing a special assessment against the private properties that will benefit from the repair. This is not an unusual concept and is typical in almost all municipal infrastructure projects. What is also not unusual in this case is that the statutes make the Department responsible for enforcing these provisions.

Given the lack of such enforcement, Riverkeeper went forward recently to raise the legal issue presented in a new court case filing. The lack of a special assessment is problematic. However, in this case, repair of the dam and the costs and public funds

expended for that repair will provide enhanced recreational benefits to a very small population of private property owners, who it appears will not be specially assessed by the County to cover or defray the costs of repair.

The Milwaukee River provides environmental and recreational benefits to the private lands and parks upstream from the Dam. And because of the Department's appropriate order, the Dam gates have been open since 2008. During the past 9 years, the river is performing better from an environmental perspective and also providing ample recreational benefits to private riparian owners and the public through use of Lincoln and Estabrook Park. Repairing the dam to allow for an impoundment for a portion of the year will only add a small increment of additional benefit that will inure to private property owners. The reality of that can be seen in the decision of a private landowners group to intervene in the original lawsuit. No one with knowledge and expertise on the subject is claiming that the County parks will suffer if the Dam is removed, just the opposite. As demonstrated though the testimony of recognized fishing experts at the Department's recent hearing, fishing is substantially improved with a flowing river and thus by removal of the Dam.

The current proposal for repair will raise and expend public tax dollars for a non-public purpose. Wisconsin law has long prohibited these types of expenditures, and specifically regarding the construction of dams. *See Attorney General v. City of Eau Claire*, 37 Wis. 400 (1875). The Department should be aware of this issue as it continues to oversee the abatement of the Dam.

Based on the applicable law and for the reasons described above, Riverkeeper requests that the Department enforce the statutes and either require removal of the Dam or require proper plans and approvals before any repair work is commenced on the Dam.

Very truly yours,

Joseph R. Cincotta

COPY

STATE OF WISCONSIN CIRCUIT COURT MILWAUKEE COUNTY

MILWAUKEE RIVERKEEPER,

Plaintiff,

Case No. 11-CV-008784

vs.

MILWAUKEE COUNTY,

Defendant.

FILED
14 SEP 27 2012 14
JOHN BARRETT
Clerk of Circuit Court

ORDER

On May 24, 2012, the Court granted Milwaukee Riverkeeper's Motion for Summary Judgment, declaring the Estabrook Dam (the "Dam") a public nuisance, and further ordering Milwaukee County the "County") to prepare a plan to abate the nuisance by June 25, 2012.

In June 2012, the County submitted its abatement plan to the Court and Milwaukee Riverkeeper.

At a status conference on August 17, 2012, the Court determined the plan deficient for, among other things, failing to clearly explain how and when the nuisance would be abated. The Court ordered:

1. On or before November 15, 2012, the County shall file a pleading stating it has elected to either (1) repair and maintain or (2) tear down the Dam.

2. If the County elects to repair and maintain the Dam, the County shall provide in the pleading a detailed plan in plain language with the following information:

   a. A detailed timetable for actions in furtherance of the election, consistent with and in demonstrable compliance with all applicable federal, state and local legal requirements, including requirements of the Department of Natural Resources and Bureau of Land Management.
   b. A detailed plan for funding the repair, maintenance and future operations, including cost estimates for each material element of the plan.

3. If the County elects to remove the Dam, then the County shall provide the following information:

   a. A detailed timetable for actions in furtherance of the election, consistent with and in demonstrable compliance with all applicable federal, state and

EXHIBIT
A

state legal requirements, including requirements of the Department of Natural Resources and Bureau of Land Management.

b. A detailed plan for funding the removal, including ot estimates for each material element of the plan. .

4. A status conference in the case shall be held on November 29, 2012 at 9:00 a.m.

DATED this 27 of September, 2012.

Christopher R. Foley
Circuit Court Judge

Thank you for contacting the Department of Natural Resources.

Enclosed are the project application materials you have requested.

The Wisconsin Department of Natural Resources helps protect your rights in public waters as well as public safety, by ensuring adequate planning and design of projects affecting fish and wildlife habitat, water quality and natural scenic beauty. This is done through permit and plan approval requirements for individual water projects. Chapters 30 and 31 of the Wisconsin Statutes require written permits for certain activities on or near a waterway.

Plan approval is required for dam repairs or reconstructions on navigable and non-navigable watercourses. Contact your WI DNR Regional Water Management Engineer to determine whether formal approval is required for your maintenance activity or minor repair.

Before submitting this application for dam repair or reconstruction, please contact your county, city, or village zoning department to find out if your project site is in either a mapped wetland or floodplain and if local zoning restrictions could affect your project.

A complete application with detailed drawings will help us make a decision about your permit application for dam repair or reconstruction. The following information is necessary for a complete application.

To help us make a decision in the shortest time possible, please submit the following information. Please submit three (3) hard copies and one (1) electronic copy for a dam repair or reconstruction application:

- ☐ **Application Form.** A complete, signed application form "Water Application for Project Permits (WRAPP)" (Form 3500-053) **http://dnr.wi.gov/files/pdf/forms/3500/3500-053.pdf**.
- ☐ **Application fee.** Checks should be made payable to "Wisconsin DNR". A list of fees can be found at **http://dnr.wi.gov/topic/waterways/documents/PermitDocs/feesheet.pdf**.
- ☐ **Copy of deed or similar proof of ownership, permanent access or construction agreements.** Please provide verification of ownership and/or permanent easement for the parcel of land on which the dam sits, as well as permanent access easements or construction agreements which allows for the repair or reconstruction.
- ☐ **Site maps.** A map on the scale of not less than 4 inches to the mile, show the lands that may be affected by the repair or reconstruction of the dam. Please provide copies of relevant maps (when possible), such as a USGS topographic map, Wisconsin Wetland Inventory map, FEMA floodplain map, NRCS soils map or a zoning map, with the project clearly identified.
- ☐ **Good photographs that clearly show the existing project area.** Be advised that too much snow cover or vegetation may obscure important details. If possible, have another person stand near the project area to provide size reference.
- ☐ **Dam Plan Review Checklist.** The designer should use the **dam plan review checklist** as a guide to make sure that all of the required information is addressed in the plans and specifications. The checklist only needs to be completed for reconstruction projects which include alterations or modifications that will change the hydraulic capacity or stability of the structure.
- ☐ **Temporary Drawdown Checklist.** If the repair or reconstruction requires a temporary lowering of the impoundment, please provide information identified in the **temporary drawdown checklist**.

EXHIBIT
tabbies B

- ❑ **Narrative description of your proposal.** On a separate blank page, prepare a narrative that describes the purpose of the project, information on other participants if this is a cooperative effort, how you intend to carry out the project including methods, materials and equipment, and your proposed schedule and sequence of work. If this information is included in the project design report with the plans and specifications, please indicate which pages the information can be found.

  Note that any temporary coffer dams must be designed for at least a 10-year flood event. If a preliminary design for the coffer dams is included in this submittal, the design can be approved under the Chapter 31 plan approval, and proposed design changes by the contractor would go through a change order and plan amendment. If not included, the contractor's coffer dam design would need to be submitted for a separate Chapter 30.19 permit and prepared by a Professional Engineer registered in Wisconsin.

- ❑ **Plans and Specifications.** Showing all of the components of the dam in detail and describing required construction standards. Include any project design report, hydrologic/hydraulic analyses, soil borings, stability analyses or other information used in the project design. Also provide estimated itemized cost information for the project to confirm financial assurance. The plans and specifications must be prepared by a professional engineer registered in Wisconsin. The engineer should have experience with dam design and construction.

- ❑ **Dam Failure Analysis.** If required for large dams, the designer should use the **dam failure analysis checklist** as a guide to make sure that all of the required information is addressed. If you own a large dam, consult with your WI DNR Regional Water Management Engineer to verify whether the analysis is needed for your project.

- ❑ **Erosion Control Standards.** Temporary and permanent erosion control measures must exceed the stormwater management technical standards.

- ❑ **Wetland Permit Application.** If wetlands are present where any work will be done, supply the additional information requested in the Wetland Permit application found at: **http://dnr.state.wi.us/topic/Waterways/construction/wetlands.html**.

- ❑ **Wild Rice.** If any existing wild rice is known to be within the proposed impoundment, provide a brief narrative indicating potential impacts.

When you are finished compiling all of the requested application materials, remember to check your application for completeness. If you are applying on paper, all documents listed above must also be submitted in an electronic format, either by enclosing a disk with your application materials, providing a link to an ftp site, or by other electronic methods. If possible, please create a separate file for each component of the application (i.e., forms, photos, maps, plans, etc.). Each file must be less than 15 megabytes in size, and the total size of the files combined must be less than 30 megabytes. We also recommend that you keep a complete copy for your own records. Remember, incomplete applications may cause a delay in processing.

Please send the completed application materials, and fee to the permit intake address based on the county where your project is located on our permit intake & contacts page, or go to dnr.wi.gov.

Note: **Depending upon the type, complexity, and location of your proposed project, processing can take 60 working days (3 months) to complete a review if your application is completed in detail.**

Note: **A plan approval is required for any repair or reconstruction project. The plans should be engineered to limit the potential liability of dam owners. Plans prepared under the supervision of a professional engineer registered in Wisconsin are required for all large and small dams.**

MILWAUKEE COUNTY
PARKS

CHRIS ABELE, MILWAUKEE COUNTY EXECUTIVE
JOHN DARGLE, JR., DIRECTOR OF PARKS, RECREATION AND CULTURE

Date: October 14, 2014

To: Marina Dimitrijevic, Chairwoman, Milwaukee County Board of Supervisors

From: John Dargle, Jr., Director, Department of Parks, Recreation and Culture

Subject: **Estabrook Dam Environmental Assessment – ACTION**

POLICY

The Department of Parks, Recreation and Culture (DPRC) is seeking direction on which alternative identified in the draft Environmental Assessment to pursue.

BACKGROUND

Milwaukee County is currently under an Administrative Order from the Wisconsin Department of Natural Resources (WDNR) to repair or remove the Estabrook Dam by December 31, 2014. The Bureau of Land Management (BLM) has asserted they have jurisdiction of an island situated near the center of the dam structures and requested that the County prepare an Environmental Assessment (EA) so that they can evaluate the appropriateness of proposed construction activities consistent with the National Environmental Policy Act. Permission to access the island is essential to either of the alternatives. The draft EA identifies and evaluates different alternatives and their implications for the area impacted by the Estabrook Dam. The draft EA is required prior to BLM granting the requested access.

In 2014, Milwaukee County and its engineering consultant AECOM organized and led a technical team tasked with compiling relevant information and preparing the draft EA. The team is comprised of knowledgeable representatives from DPRC, DAS Architecture and Engineering Division, AECOM, Southeast Wisconsin Regional Planning Commission (SEWRPC), WDNR, BLM, US Army Corps of Engineers (USACE) and the US Fish and Wildlife Service (FWS).

A Public Scoping Meeting was held on June 5, 2014 by the DPRC and its consultants to solicit ideas and input on potential alternatives for the dam. The public was asked to present any new alternatives that were not considered in the draft document and no new alternatives were identified. A Public Information Meeting was held on September 3, 2014 at Nicolet High School. The DPRC took this opportunity to summarize the draft EA, explain alternatives and why it is recommending removal of the dam. Attendees had an opportunity to provide comments on the draft EA. Public comments from these meetings along with comments from two on-line surveys, correspondence and other

ADDRESS
9480 Watertown Plank Road
Wauwatosa, WI 53226-3560

PHONE/FAX
ph: 414 / 257 PARK (7275)
fax: 414 / 257 6466

EMAIL
parks@milwcnty.com

EXHIBIT C

stakeholder sources were collected and integrated into the draft EA. The BLM has directed the DPRC to specify one preferred alternative in the final EA submitted for their evaluation.

The DPRC has reviewed the alternatives and supporting information included in the draft EA and is seeking the concurrence of the County Board and County Executive with its recommendation of dam removal as the preferred option in the final EA that it submits to BLM in support of the request from the County for construction access. DPRC recommends this alternative because it would result in these benefits:

- Capital savings of over $844,000 compared to the previous alternative
- Require no annual operation and maintenance
- An operational budget savings of $160,000 annually
- The present worth analysis indicates a $3,460,000 savings over 20 years
- Eliminate the unwanted accumulation of sediments and debris upstream
- Restore the river to a more natural looking, free flowing condition
- Remove impediments to navigation and fish passage
- Eliminate upstream flooding impacts caused by the existing dam
- Lower river levels during floods more than the other options
- Improve public safety and reduce potential risks and liabilities
- Provide a more regular hydrologic condition for aquatic species
- Eliminate the operational and regulatory requirements of dam ownership

RECOMMENDATION

After careful review of all the alternatives identified and the supporting information included in the EA, the DPRC recommends that dam removal be the preferred alternative presented in the final EA that is submitted to the BLM. It is further recommended that if dam removal is approved that the DPRC is authorized to proceed with dam removal and that the DPRC is authorized to apply for or modify grant applications for financial assistance for the purpose of dam removal.

It is further recommended that the DPRC, the Department of Administrative Services, the County Comptroller, Risk Management, Corporation Counsel and Register of Deeds and other appropriate Milwaukee County staff be authorized to prepare, review, approve, execute, record all documents and to perform all actions required to facilitate removal of the Estabrook Dam and that the County Executive and County Clerk be authorized to execute any required documents.

Prepared by: Kevin Haley, Landscape Architect, Planning & Development Division

Recommended by:

Laura Schloesser, Chief of
Administration & External Affairs

Approved by:

John Dargle, Jr., Director

Attachment 1 - Draft Environmental Analysis Executive Summary and Attachment 1
Attachment 2 - Presentation to July 22, 2014 meeting of Parks, Energy & Environment Committee
Link to Draft Environmental Analysis - http://county.milwaukee.gov/EstabrookParkDam

copy: County Executive Chris Abele
Raisa Koltun, Chief of Staff, County Executive's Office
Kelly Bablitch, Chief of Staff, County Board
Sup. Gerry Broderick, Chair, Parks, Energy and Environment Committee
Sup. Khalif Rainey, Vice-Chair, Parks, Energy & Environment Committee
Erica Horton, Fiscal Mgt. Analyst, Admin & Fiscal Affairs/DAS
Scott Manske, Comptroller, Office of the Comptroller
Alexis Gassenhuber, Parks, Energy & Environment Committee Clerk
Jessica Janz-McKnight, Research and Policy Analyst, Office of the Comptroller
Sup. Theodore Lipscomb, District 1, County Board of Supervisors
Sup. Willie Johnson Jr., District 13, County Board of Supervisors
Steve Cady, Research Services Director, Office of the comptroller

ATTACHMENT 1

ESTABLISHING FINANCIAL RESPONSIBILITY

A. Types of Owners

Past experience has revealed the advantages and disadvantages of the various classes of dam owners.

1. Federal agencies - A major concern with federal ownership is whether or not the Department will have sufficient control over operation and maintenance of the dam. Federal takeover may substantially hinder the state in fulfilling its trust responsibilities.

2. State/local government - Experience with state/local governments has been mixed. Often state and local units of government don't have the money or personnel to effectively operate a dam. The ability of these governments to finance dam operation and maintenance through taxes is unlikely to improve in the future, especially considering levy limits and the general feelings of taxpayers.

3. Private ownership - Some types of private owners, especially the larger public utilities, have demonstrated responsibility.

4. Foreign ownership - Sections 31.21 and 196.53 prohibit a foreign corporation from holding a dam permit or franchise to operate a dam.

B. Ownership/Operation Arrangements

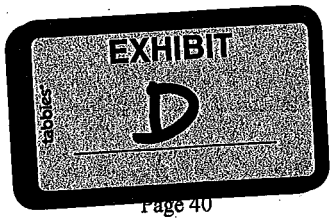
1. Split ownership - We discourage split ownership because it makes enforcement extremely difficult. Either owner can disclaim responsibility for violation of operating requirements. It is extremely difficult to coordinate repairs. Split ownership, in our judgement, does not assure proper operation or maintenance.

2. Separate owner and operator - A separate owner and operator is an acceptable arrangement. The owner is responsible for damages, due to improper operation of the dam.

3. Multiple operators - Multiple operators make it difficult to fix responsibility for improper actions. There are only a few examples of this situation. Any new ones should be discouraged.

C. Establishing Financial Responsibility

The basis for establishing a dollar figure for financial responsibility is the cost to put the dam in good condition, plus the annual maintenance cost (times an inflation factor) plus the cost of damage in the 100-year flood (times an inflation factor), times the probability of the 100-year flood occurring in the 10-year period. We ordinarily use the 100-year flood and a 10-year period, although the method can be applied to any flood frequency or time period. The previous years CPI inflation rate should be used unless otherwise justified.



milwaukee RIVERKEEPER®
Waterkeeper® Alliance member

1845 N. Farwell Avenue • Suite 100 • Milwaukee, WI 53202
ph 414.287.0207 • fax 414.273.7293 • milwaukeeriverkeeper.org

April 6, 2016

William Sturtevant
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Dr.
Milwaukee, Wisconsin 53212

RE: *Draft Environmental Impact Statement public review - Estabrook Dam Rehabilitation and Operation*

Dear Mr. Sturtevant:

Attached hereto please find a total of 1,604 names and comments from individuals who signed a petition requesting the Estabrook Dam be removed between the dates of April 18, 2015 and April 6, 2016. The petition states:

> "The Estabrook Dam is an outdated structure and is bad for the environment. The dam puts homes and businesses in danger of flooding, places an unfair burden of expensive insurance payments on those residents and business owners, and costs too much to maintain. It pollutes the Milwaukee River and damages fish and wildlife habitat."

This list was reviewed and duplicate signers were removed. We are submitting these because these voices are important for you to hear from on this issue.

Beginning March 13, 2016, Milwaukee Riverkeeper established an easy to use method for any citizen to submit a comment to the Department via the email provided on your website: DNREstabrook@wi.gov. As of 4:00 pm CST today, Milwaukee Riverkeeper tracked at least 336 emailed letters from individuals regarding the Wisconsin Department of Natural Resource's Environmental Impact Statement and the rehabilitation and operation of the Estabrook Dam. Attached please find a summary excel workbook containing those 336 names and comments. These are not meant to be duplicate submissions, but rather, we wanted to be sure there were no technical issues receiving these prior to your deadline.

We thank you in advance for your careful consideration of the petition and public comments on the Wisconsin Department of Natural Resource draft Environmental Impact Statement regarding the rehabilitation and operation of the Estabrook Dam.

Very Truly Yours,

Jennifer Bolger Breceda
Executive Director, Milwaukee Riverkeeper