

Mill Creek Restoration Project

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Comments on the Army Corps of Engineers Draft Mill Creek General Reevaluation Report and Draft Environmental Impact Statement

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I. Introduction

Over five years ago, the Army Corps of Engineers undertook a \$12 million study, called a “General Reevaluation Report” (GRR), to address flooding in the Mill Creek communities of Sharonville and Evendale. Interested parties, including local governments, citizens, businesses and MCRP, had high expectations for a serious evaluation of viable options for reducing flood damages in a fiscally responsible and ecologically sound manner. The Corps has not produced that plan.

Instead, it is proposing a channel modification project that is prohibitively expensive for local governments and property owners, that protects upstream properties at the expense of downstream properties, and that is so environmentally insensitive it would essentially foreclose efforts to restore and regenerate the Mill Creek ecosystem forever.

This paper summarizes Mill Creek Restoration Project’s concerns and comments on the Corps GRR. If the Corps goes back to the drawing board, Mill Creek Restoration Project (MCRP) urges that it carefully examine – with input from all of the affected parties – effective and less expensive nonstructural alternatives and watershed approaches to flood damage reduction.

II. The Costs

The total costs for the proposed channel modification project are still unclear, since the Corps GRR contains inconsistent, vague and contradictory information. The Corps local sponsor, the Mill Creek Valley Conservancy District (MCVCD), reported last week that it believes the estimated initial cost for the project is \$806.5 million (\$622 million federal and \$184.5 million from local sources). However, the GRR indicates that after adding interest during the construction period, the construction cost will increase to \$743.7 million. In addition to the \$184.5+ local costs for real estate, relocations and hazardous waste disposal, the Corps estimates it will cost over \$28 million to maintain the project over its design life, an average annual cost of about \$564,514 for the MCVCD. This yearly maintenance cost estimate does not appear to include administrative costs, interest and inflation, and the need for a sinking fund or escrow to cover replacement costs for the hard engineering components that the Corps is recommending.

To date, there is no financing plan that identifies who will pay and how the required local costs will be allocated. To raise the initial \$184.5 million, the MCVCD has said that it will either have to assess the owners of 5,700 parcels thought to benefit from the Corps project, or assess Mill Creek floodplain communities, or both. This means that communities downstream of Sharonville and Evendale (Reading, Arlington Heights, Sycamore Township, Elmwood Place, St. Bernard and

the City of Cincinnati) could be required to pay, without receiving any benefits from the project. Other funding alternatives that have been discussed include sending the channel modification bill to all of the communities located in the Mill Creek watershed, or spreading the costs across all of the local governments in Hamilton County. Given the financial problems and budget shortages that most local governments are struggling with, and given other community priorities, the Corps' recommended project is fiscally irresponsible and should not proceed.

III. Environmental Concerns

A. Channel Modification Impacts

The Corps proposes a massive and damaging construction project through the heavily congested and developed Mill Creek corridor in Hamilton County. The project will cause severe short- and long-term damages to the Mill Creek riverine-riparian ecosystem. Although MCRP recognizes that the Corps made attempts to integrate environmental features into the proposed project, these efforts are akin to placing small band aids on a hemorrhaging patient.

Widening the Mill Creek channel will require dredging over \$1 million cubic yards of sediments that may be contaminated. Dredging the river will adversely impact water quality and aquatic life. Further, the Corps design uses a width to depth ratio for the channel that will not convey bedload, requiring never ending dredging in future years with concomitant impacts to water quality and aquatic life. The channel widening will also require major excavation of land along Mill Creek, including areas of contaminated fill that could release pollutants to the river and local environment and potentially impact construction workers.

Channelization of Mill Creek will degrade aquatic, semi-aquatic and terrestrial wildlife habitat and remove trees on both sides of the river. Removing the riparian canopy will impair water quality, in part by causing increases in stream temperatures. The Ohio EPA has adopted a Mill Creek TMDL for nutrients. The Corps plan will violate the TMDL, causing a loss of oxygen in the river and development of algal blooms. Ohio EPA has stated it can't support the project and will deny Clean Water Act Section 401 permits if the Corps doesn't significantly change the project.

Overall, the proposed project will cause irreparable damage to the environment through channel alterations and widening, on one or both sides of Mill Creek; lining the channel in concrete for at least half a mile within Reading (Corps-designated Section 6); heavy use of riprap in the channel and construction of armored sheet pile and other high floodwalls; and construction of permanent maintenance access roads inside the river channel, just as the Corps has done in Cincinnati.

B. Cumulative Impacts

The draft Environmental Impact Statement (DEIS) fails to adequately and seriously address cumulative impacts as required under the National Environmental Protection Act (NEPA). The Corps must examine cumulative impacts to the Mill Creek riverine-riparian ecosystem, including but not limited to:

- Past and future channelization.
- Past and future removal of trees and other woody vegetation within riverine-riparian zones.
- Future and unending dredging of contaminated sediments.
- Past and future destruction of aquatic and terrestrial habitat.
- Future construction of vertical floodwalls.
- Past and future construction of maintenance roads inside the river channel.

C. Executive Order 11988: Floodplain Management

Under this Executive Order, Federal agencies are required to avoid long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. The Corps proposed project violates this order by causing adverse impacts from major modifications of the floodplain and by encouraging floodplain development.

D. Impacts on Fish and Wildlife

The U. S. Fish and Wildlife Service, in its November 16, 2004 letter to the Corps, states: “The Channel Modification Plan would have the greatest impacts to the Mill Creek watershed. As such, we are opposed to this alternative. Feasible alternatives which minimize impacts to waters of the U.S. should be pursued” (emphasis added).

The U.S. Fish and Wildlife Service documented that the Corps project lies within the range of Federally-listed threatened and endangered species, including the bald eagle, the Indiana bat, running buffalo clover, rayed bean mussel and sheepsnose mussel (both mussels are Federal candidate species). A number of Ohio endangered and threatened species are also present within the project area. However, the Corps draft EIS states “Because none [threatened and endangered species] are known to occur within the project activity area at this time, state and federally listed threatened and endangered species should remain unaffected under the CM-2 alternative. Most of the construction activities are located close to Mill Creek, avoiding any habitat that may be utilized by threatened and endangered species.” This statement ignores the Fish and Wildlife Service information and erroneously assumes that species of concern don’t use the river and riparian corridor for food and habitat. The Corps must address this serious problem.

E. North Bend Dump – Floodwall Impacts in City of Cincinnati

The Corps proposes to construct floodwalls upstream from the City’s high investment Caldwell Seymour area, and just downstream of the Hamilton County Fairgrounds and Vine Street bridge. The floodwall, to be located across Mill Creek from the North Bend dump, will raise the elevation of flood waters and inundate landfill. This will lead to accelerated erosion and slumping of the landfill into Mill Creek and increased leachate discharging to Mill Creek, adversely impacting water quality. The Corps should address this problem.

F. East Fork Mill Creek Tributary -- Habitat Destruction

The proposed channel widening will destroy the Newberry Riffles that MCRP and Butler County Environmental Services installed with partial support from Clean Water Act Section 319 funding. These instream structures are oxygenating the water and providing critically needed aquatic habitat and should not be disturbed.

G. Soil Disposal Areas – A Question

The Corps GRR maps include notations about “soil disposal areas.” Please confirm whether these sites are proposed locations for disposing of Mill Creek-related soils or whether they are areas that were previously used for soil disposal.

IV. Disproportionate Impacts

A. According to the Corps

While the Corps proposal might help to reduce flood damages in Sharonville and Evendale some day, this plan will place an enormous economic, social and environmental burden on downstream communities. The draft Environmental Impact statement (DEIS) and other Corps GRR documents avoid any meaningful discussion about disproportionate impacts from the channel modification project. Here's what the Corps does say about the subject:

“Adverse impacts ...such as potential vegetation removal and impacts to creek water quality would have little to no affect on surrounding communities, low-income or otherwise” (DEIS, page 145).

“Lower income and minority communities related to the Mill Creek project area are currently affected by the condition of the creek and would, therefore, benefit from implementation of the project” (DEIS, page 145).

Regarding the demolition of 52 residential structures, impacting 60 households: “Replacement housing is available.” “The impacts of the residential relocations are relatively minor. Any hardship experienced by the families will be mitigated by relocation assistance. Community cohesion should not be affected by these relocations” (DEIS, page 132).

And finally, “Replacement housing is available. A Real Estate staff appraiser has determined that there will be no difference in value between flood plain property to be evacuated and comparable flood free property” (Volume 6 –Economics Appendix, Real Estate Plan, page 12).

B. Disproportionate impacts to Reading, Village of Arlington Heights and Lockland.

Within Corps-designated Section 6 of Mill Creek (that includes parts of Arlington Heights, Lockland and Reading), the Corps is proposing a massive construction project that will require demolition of 89 residential and commercial buildings – 74% of the total number of structures to be torn down and relocated. The DEIS does not address the loss of property tax and income tax revenues from the demolished businesses and homes. Further, Reading officials have stated that the Corps grossly underestimated the value of these buildings.

Reading has practiced sound floodplain management by utilizing the Mill Creek floodplain for greenspace and recreational parks. Under the Corps channel widening, ball fields in Koenig Park will be destroyed. Four public road bridges in Reading (Clark Road, Koehler Avenue, Benson Avenue and Columbia Road) that cross Mill Creek will be demolished, and eventually replaced at some unknown time. The huge construction zone along the Mill Creek corridor will require demolition and relocation of all of the utilities (e.g., sewer, water, gas, electric, telephone, cable). All of this demolition and relocation will cause a major disruption in commerce and everyday life for a minimum of eight years and likely much longer.

Throughout the Reading portion of Mill Creek the Corps will use only hard engineering solutions, lining the river bed and streambanks with concrete in one half-mile river reach, lining other parts of the channel with riprap and erecting anchored sheet pile walls, up to thirty-feet high in some locations. The proposed channelization of Mill Creek in Reading will effectively destroy the

river's health and degrade the entire stream corridor, diminishing the current attractiveness of Reading and decreasing public/private property values.

Ironically, Reading officials have said that their city does not have a Mill Creek flooding problem. Rather, their major problem is flooding in basements that the Metropolitan Sewer District is now addressing. The Corps has stated its intent to start project construction in downstream communities first. Since there are no guarantees that the Corps will ever protect Sharonville and Evendale from flooding, this is a dangerous and unwise proposition for downstream communities.

C. Disproportionate Impacts to City of Cincinnati –and Environmental Justice Issues

1. Broken Promises: When it channelized Mill Creek in the past, the Corps damaged and degraded the river and contributed to blighted conditions in the Mill Creek corridor, where underserved and classic Environmental Justice neighborhoods with predominantly low income and minority residents are located. Prior to initiating work on the Mill Creek GRR, the Corps committed to addressing its responsibility to mitigate or repair these damages.

In an August 7, 1996 letter to Mill Creek Restoration Project, the Assistant Secretary to the Army for Civil Works, then H. Martin Lancaster, promised that the Corps GRR would address both nonstructural alternatives and the need for mitigation and repair of past damages to Mill Creek. He wrote, “Non-structural and mitigation measures would be addressed in the GRR, rather than in the ongoing economic analysis as you suggest. The GRR would reevaluate authorized, uncompleted flood control features, to include consideration of structural and non-structural flood damage reduction alternatives and mitigation of the environmental effects of both the completed and uncompleted features (emphasis added).

In 2004, the Corps admitted it was not keeping its promise and did not address the subject in its GRR and in its recommendation for a future project. The Corps justification for renegeing on its promise is that it didn't have enough funding, even though it had over \$12 million dollars to complete the GRR.

2. Induced/Increased Flooding for Cincinnati: The Corps' proposed channel widening of Mill Creek upstream of Galbraith Road will induce and increase flooding in downstream Cincinnati. Additionally, the Corps has stated that downstream of Mitchell Avenue, the Corps only constructed the channel to meet a 50-year (2%) flood event, even though it was authorized and required to meet a 100-year (1%) flood event.

3. Proposed Floodwalls: To address the new flood hazards it will create in Cincinnati, the Corps proposes to build over three linear miles of flood walls along Mill Creek, up to fifteen-feet high in some places. The location of the floodwalls coincide with the same alignments as the City's Caldwell Seymour and South Mill Creek Greenway Trails. The floodwalls are incompatible with and detrimental to the City's Mill Creek Greenway Program. In addition, the walls will cause additional ecological damage to the riverine-riparian system and will literally wall off the river from public view. To address anticipated aesthetic objections, the Corps suggests: “Landscaping and decorative wall treatments could be used to improve the appearance of floodwalls” (DEIS, page 132).

4. Conflicts with MSD Global Consent Decree: Under the Corps proposal, rate/tax payers will underwrite costs to construct MSD capital projects required under the MSD Global Consent Decree, and then might have to pay again for demolition and relocation of the sewer projects due to Corps construction. The Corps also proposes to construct a 15-foot-high flood wall between North Bend Road and Seymour Avenue, in the same location mandated in “Exhibit 9: Supplemental Environmental Projects Plan” of the MSD Global Consent Decree. These problems need to be addressed.

IV. Mill Creek Recommendations

MCRP doesn't have the Corps' resources to support a major study to determine how to reduce flooding in Sharonville and Evendale without sacrificing the health and vitality of the river and downstream communities. However, several parties have asked MCRP to provide some general guidelines and recommendations. Here they are:

A. Guidelines for Developing Better Flood Damage Reduction Alternatives:

1. They should be fiscally responsible and ecologically sound.
2. They should require a fair and equitable cost allocation to affected communities for installation/construction and ongoing maintenance.
3. They should prevent induced and increased flooding in all communities downstream from Sharonville and Evendale.
4. They should include an examination of any possible flood damages along Mill Creek in Cincinnati since the Barrier Dam and the Winton Lake impoundment were constructed. If actually needed, nonstructural solutions, not floodwalls, should be implemented, compatible with the City's Mill Creek Greenway Program.
5. They should include repair/mitigation of the ecological damages the Corps caused from past channelization of Mill Creek in Cincinnati, St. Bernard and Sharonville, consistent with and supportive of the Mill Creek Watershed Greenway Program.
6. They should avoid any conflicts with projects required under the MSD Global Consent Decree.
7. They should include a 50% federal/local cost share for future development of the Mill Creek hike and bike trail.
8. They should undergo a rigorous independent review of costs and benefits for all affected parties.
9. They should concentrate on sound floodplain management and nonstructural approaches.

B. General Recommendations for Nonstructural Solutions

1. Maintain the Early Warning System to alert floodprone businesses so that they can take steps to reduce property damages. The Mill Creek flood warning system was installed in September 2004.

2. Determine how many of the thirty businesses identified by the Corps are already reasonably protected from flooding (e.g., Ford Motor Company and General Electric ring levees and businesses that are located on elevated land to remove them from flood hazards).

3. Inventory vacant, abandoned and underutilized properties in Sharonville and Evendale, outside of flood hazard areas, to determine whether it may be feasible to relocate small-to-medium sized companies that have suffered repetitive and high losses. It may be possible to keep them in the same communities. Local resources that might assist in this effort include the Hamilton County Development Corporation and the Port of Greater Cincinnati Development Authority. If there isn't sufficient land in these two communities, develop inter-governmental agreements with other watershed communities to keep the businesses in Hamilton County.

4. For businesses that can't or won't relocate, assist them with flood-proofing structures and protecting valuable equipment and supplies (e.g., using sand bags, moving valuable supplies and equipment to higher floors within multi-story buildings, developing plans to rapidly move vehicles and heavy equipment out of hazard areas).

5. For all Mill Creek communities: Declare a moratorium on any future development within the Mill Creek floodplain, and most especially within known flood hazard areas.

6. Do as much as possible to restore the natural storage capacity of the floodplain. This includes increasing pervious surfaces and planting trees and other vegetation to absorb, slow down, and evapotranspire floodwaters. When businesses relocate, increase storage of flood waters by restoring perviousness (removing buildings and pavement from parking lots and driveways, tilling heavily compacted soils, replacing turf with native trees, shrubs and plants) and constructing wetlands and other facilities that can effectively store high flows.

7. Encourage use of other available vacant/underutilized floodplain land for constructed wetlands. Some of the larger companies in the floodplain have excess land that could be used for this purpose, benefiting them and their neighbors.

8. Evaluate the potential benefits and increased storage capacity that a linear series of "side saddle" and "pocket" wetlands could provide along the constricted Mill Creek channel.

9. Educate every Mill Creek watershed community about nonstructural solutions to reduce flood damages and sound floodplain management alternatives to expensive and damaging structural alternatives. There is a 1998 compilation of federal funding sources for helping local governments titled "Federal Programs Offering Non-Structural Flood Recovery and Floodplain Management Alternatives."

10. Revisit and reevaluate the Corps "NS-2A" plan. Expand the scope to include nonstructural and ecologically sound approaches (those listed above and others) and to determine whether additional levees could be added to address Sharonville's concerns about this alternative.