

April 25, 2016

Mindy M. Simmons
Designated Federal Officer (DFO) for the Environmental Advisory Board
U.S. Army Corps of Engineers
ATTN: CECW-P,
441 G St. NW.;
Washington, DC 20314

RE: Disposition of outdated U.S. Army Corps of Engineers infrastructure

Dear Ms. Simmons:

Thank you for the opportunity to provide feedback and recommendations to the Environmental Advisory Board to the Chief of Engineers. American Rivers protects wild rivers, restores damaged rivers, and conserves clean water for people and nature. Since 1973, American Rivers has protected and restored more than 150,000 miles of rivers through advocacy efforts, on-the-ground projects, and an annual America's Most Endangered Rivers® campaign. Headquartered in Washington, DC, American Rivers has offices across the country and more than 200,000 members, supporters, and volunteers. Our comments today concern the need for the USACE to develop a better, more streamlined process to physically remove infrastructure from rivers and waterways once it no longer serves its intended purpose.

Background:

Centuries of constructing dams and levees on rivers have disconnected rivers resulting in over-simplified habitat, poor water quality and altered flow regimes. When these structures are no longer necessary, removal offers the most effective means of restoration. American Rivers has extensive experience planning, managing, and advocating for river restoration projects that remove or alter outdated infrastructure that no longer serves its intended purpose. Removing structures like dams and levees is the quickest way to restore natural river processes.

The USACE's inventory of infrastructure includes 707 dams, 14,500 miles of levees, 12,000 miles of commercial inland navigation channels, and 197 lock sites/241 chambers, much of which was constructed during the first half of the twentieth century. This infrastructure is aging and degrading and much of it does not meet design and safety standards of today. Investments needed to undertake the repairs and rehabilitation necessary to ensure the continued reliability and safety of this infrastructure continue to rise. In addition, many structures have outlived their original intent and are no longer being operated for their authorized purpose.

In recent years, the USACE and federal government have begun to recognize that it is not in the federal taxpayer's interest to maintain the liability and financial burden of this extensive portfolio of aging and outdated infrastructure. The agency has recognized the

need to take a more systematic approach to infrastructure asset management. We understand the agency is developing a process to determine the highest priority projects for disposition and an improved process for disposing of these structures.

Disposition of outdated infrastructure typically proceeds under the authority of Section 216 of the Flood Control Act of 1970, Review of Completed Projects, which grants the USACE the authority to review operations of completed projects without a new project-specific authorization. Disposition studies typically evaluate four alternatives:

- 1) No action- continue with minimal operation, maintenance and repair
- 2) Transfer ownership to other Federal or non-Federal owner
- 3) Reauthorize the project to include other purposes, which would involve additional project sponsors
- 4) Deauthorize the project and dispose of it.

The USACE's asset management approach is primarily focused on eliminating the agency's liability and financial burden, thus the overall goal of disposition studies is to determine how to shift ownership of outdated structures onto another entity. Removal of the structure may be evaluated, however, removal and restoration of natural stream conditions are not the goal. The USACE's effort to dispose of outdated structures presents an enormous opportunity to remove unnecessary infrastructure and restore natural river processes. The USACE should seize this opportunity by refining their disposition process and policy to make restoration of natural river processes the ultimate goal of disposition of outdated infrastructure.

Infrastructure removal is consistent with the USACE's vision of innovative and environmentally sustainable solutions to the Nation's water resources challenges.

The USACE's Vision statement is "Contribute to the strength of the Nation through innovative and environmentally sustainable solutions to the Nation's water resources challenges". We would assert that the legacy of outdated water resources infrastructure that remains in our nation's rivers, streams and waterways is a nation-wide water resources challenge. Since our nation was founded, dams, levees and other structures have been utilized to advance our society. Many of these structures continue to play an important role and will far into the future. However, many more of these structures have been abandoned, are deteriorating, and/or are no longer used for their authorized purpose. The current USACE approach to dealing with this infrastructure is to maintain it in perpetuity and when possible transfer ownership onto another entity. This long term maintenance burden and shift in responsibility onto others is neither innovative, nor the environmentally sustainable solution to this challenge. To truly achieve their vision, the USACE must develop a more sustainable approach to dealing with their outdated infrastructure.

Infrastructure like dams, locks and levees causes harm to the health of rivers and ecosystems by disrupting natural river processes and disconnecting rivers. Dams disrupt a river's natural course and flow, alter water temperatures in the stream, redirect river channels, transform floodplains and disrupt river continuity. These dramatic changes often reduce and transform the biological make-up of rivers, isolating populations of fish

and wildlife and their habitats within a river. Levees disrupt a river's ability to access its floodplain, destroying the floodplain ecosystem. These structures may have unintended consequences on public safety by contributing to heightened flood risk and residual risk. These impacts exist so long as the infrastructure remains, and the risk only increases as the structure ages and deteriorates. Repair and rehabilitation investments can keep aging, unnecessary structures in place in perpetuity, but mitigating these impacts through removal is the only long-term sustainable solution that eliminates risk and reverses these impacts on people and nature.

The USACE's approach to old and outdated infrastructure should be similar to the nation's approach to hazardous and contaminated sites. Some actions taken by the federal government, companies, or other entities in the past have had harmful impacts on the public and environment. Whether these impacts were known at the time or not, our nation has established programs like Superfund, Brownfields and the Formerly Utilized Sites Remedial Action Program to mitigate these impacts and reverse the environmental harm these actions caused to people and the environment.

USACE's current asset management strategy and disposition study process is entirely focused on cost savings and divestiture of assets, not removal of outdated infrastructure. This approach gives the impression that the USACE and federal government is willing to walk away from their structures once they determine that the structure is no longer in the nation's interest. This leaves local communities with the financial and liability burden of dealing with these structures. Rehabilitating or removing the infrastructure can be cost-prohibited to smaller entities like towns, counties or non-profits. In the case of the Green and Barren River, participants in the disposition process reported that USACE district staff recognized the harm that outdated lock and dam structures were causing to the ecology of the river and that these structures had long outlived their usefulness and authorized purposes and thus should be removed or at least breached. Participants reported that early drafts of the disposition study recommended that some of the structures be removed or breached. However, these specific recommendations were removed following Division or Headquarters review. The final recommendation was revised to deauthorize the structures with the expectation that other entities would determine what to do with the infrastructure. This gave the impression to many stakeholders that the USACE wanted to "wash their hands" of the unwanted infrastructure leaving the locals to deal with it.

On a fundamental level, the USACE should be responsible for removing their own infrastructure, but we recognize that the logistics of a set policy to this effect would be difficult to achieve and every project has individual challenges. There are other agencies and entities which may be more affective agents for removal and many removal projects are part of a broader river restoration effort by local communities, nonprofits, state and federal resource agencies, or other entities working collaboratively. As it becomes more common for watersheds to seek to remove outdated infrastructure, the USACE could maintain a focus on managing their own assets and liability, or the agency could become and active and innovative partner by establishing a disposition policy that makes removal

of infrastructure and river restoration a standard practice at the end of the life of a water resources project.

Recommendation: The USACE should recognize their responsibility to remove their infrastructure once it has outlived its usefulness and authorized purpose by establishing a disposition policy that actively seeks structure removal alternatives. In addition, the USACE should request from Congress a general authority to remove deauthorized infrastructure.

USACE should seek to eliminate policy barriers to removing outdated infrastructure and foster opportunities to partner with Federal agencies that have expertise and experience with dam removals

Despite our belief that the USACE should be responsible for removing their own infrastructure when it is no longer necessary, there are real policy, statutory and funding barriers that make this difficult. In general, the common complaint when working with the USACE holds true: they take too long and cost too much. A few specific institutional barriers include:

- *Limitations on “new starts”:* For several years, Congress has instituted restrictions on the number of new project starts the USACE can initiate in a given fiscal year. These restrictions are particularly strict for restoration projects with only one new restoration project allowed to begin in FY16. If projects to remove outdated infrastructure are large enough to warrant implementation under the USACE’s traditional project budget lines, it could take a very long time to begin projects if they are considered to be new starts and the limitations on new starts continue to be so severely restricted.
- *Potential classification as a “new start”:* The USACE has had difficulty adapting its three traditional budget lines for non-traditional project. For instance, legally mandated fish passage compliance projects have been determined to be a “new start” under the restoration budget line, rather than ongoing construction under the original project line. This approach ignores the fact that the project would not be necessary if the original project did not exist. Likewise, removal of a project at the end of its useful life should be classified as a continuation of the original project.
- *Limited capacity under Continuing Authorities Programs:* In some instances, the USACE could undertake removal of outdated infrastructure under existing CAP programs, like Section 206, Aquatic Ecosystem Restoration or Section 1135, Project Modifications for Improvement of the Environment. However, budgets for each program are limited and there is a spending cap on each project. This may be a suitable option for projects that fall under the threshold. The USACE could explore how to more efficiently utilize their CAP authorities to removal outdated infrastructure.
- *Institutional culture:* The USACE has been in the business of building structures for so long that removal can seem anathema to many in the agency and public. We have heard from conservationists who have an interest in initiating a conversation about disposition and removal of outdated infrastructure with their local District but are unsure how to proceed from both a political and process perspective. For this reason, a clear and consistent policy that establishes removal of outdated

infrastructure as a goal, and outlines a clear process for undertaking disposition studies and proceeding with removal is essential.

The most effective way for the USACE to ensure removal of their outdated infrastructure may be to partner with other federal agencies with extensive experience implementing timely and cost-effective dam removal projects such as the U.S. Fish and Wildlife Service. American Rivers has established regional partnerships with USFWS, and together we have developed an incredibly effective, cost-efficient model for removing dams. In the Southeast, this has involved partnering with staff from regional field offices for project coordination and with regional refuge staff and their equipment for actual deconstruction and removal of dams. This effort has grown from a series of small demonstration projects to what is now a highly capable, trained team of demolition experts within the USFWS who are now able to take on a wider diversity of dam removal projects. In New England, USFWS regional staff have focused their expertise on earlier project phases by working with project partners to draft dam removal and restoration design plans.

Establishing a formal process or partnership in which the USACE works with USFWS dam removal experts to evaluate the deconstruction and removal of outdated structures could benefit both agencies. Once the USACE has established that a structure should be deauthorized, they could utilize the capabilities and expertise within the federal family to develop cost-effective dam removal designs and construction. Such a partnership would meet USACE's need to remove outdated infrastructure from their inventory, while undertaking projects that advance the USFWS's mission.

If the USACE looks to past disposition efforts to establish a model for success, we recommend emulating the successful components of the disposition of five locks and dams on the Green and Barren Rivers in Kentucky. While ideally the removal of several structures should have been fully evaluated and recommended in the final disposition report, the project is proceeding quickly and will result in removal of three locks and dams. This watershed effort has brought together local communities, state agencies, federal agencies, non-profits, recreation interests and others to develop a plan that meets the needs of the community to the extent possible. Pending Congressional approval, three of the locks and dams will be transferred to other owners who will pursue removal-potentially through USFWS.

Recommendation: The USACE should evaluate the existing policy, statutory and funding barriers to removing outdated infrastructure. The USACE should also explore a partnership with U.S. Fish and Wildlife in order to utilize existing federal expertise in order to remove infrastructure in a timely and cost-effective manner.

USACE disposition policy should require a “watershed approach” that identifies additional restoration opportunities resulting from changes to a structure.

American Rivers is involved in several ongoing infrastructure disposition efforts including projects on the Green and Barren Rivers in Kentucky, the Allegheny River in Pennsylvania, and the Upper Mississippi River in Minnesota. In each instance, we have

seen clear benefits of taking a watershed approach to the disposition study in order to identify restoration opportunities that will arise as a result of the disposition of one or more pieces of infrastructure. Disposition studies also offer an opportunity to investigate potential restoration benefits and opportunities within a watershed. The removal of a structure can open up miles of stream habitat that were previously inaccessible to fish and aquatic species. For this reason we see a benefit to incorporating a watershed restoration assessment into a disposition study, or undertaking a parallel effort. However, there is no established guidance on how districts should incorporate watershed assessment into disposition studies. Here are a few examples of how districts are pursuing these efforts:

Green and Barren Rivers: The USACE completed a second disposition study of Green River Locks and Dams 3, 4, 5 and 6 and Barren River Lock and Dam 1 in 2014. A robust coalition of state and federal agencies, conservation groups, and local communities has come together to address future of this obsolete navigation infrastructure. Pending congressional authorization one lock and dam will be transferred to a regional water commission for continued use, one will be conveyed to a Kentucky Waterways Alliance for future removal, one will be conveyed to Mammoth Cave National Park for future removal, and one will be conveyed to Kentucky Department of Fish and Wildlife Resources for future removal. The final dam failed in 1965 and will remain in place.

These dam removals will contribute to broader efforts to restore the watershed. In 2011 the USACE completed an Initial Watershed Assessment (IWA) on the Green River under the authority of Section 729 of the Water Resources Development Act of 1986. The Green River IWA identified existing conditions within the watershed, highlighted the major water resource problems of the watershed and discussed the potential scope and objective of a Final Watershed Assessment based on a shared vision for the watershed. Throughout the planning process, water quality and enhanced community engagement were identified as immediate needs in the watershed. Sedimentation, agricultural inputs, incompatible land use and water supply are some of the predominant water quality concerns in the watershed. The conclusion of the IWA recommended drafting a watershed assessment management plan to define the objectives of the Final Watershed Assessment.

Allegheny River: The Pittsburgh District is pursuing a disposition study of locks and dams 5 through 9 on the Allegheny River. There has been no commercial navigation through locks and dams 8 and 9 on the Allegheny River for years. Locks and dams 6-9 are operated for commercial barges by appointment only. This study will determine if there is a Federal interest in distributing or transferring operation and maintenance costs of the Upper Allegheny River locks and dams 5-9 to another interested entity. Simultaneously the District is pursuing an Allegheny River watershed habitat connectivity assessment under the authority of a Committee approved Study Resolution for the North Central Pennsylvania. The feasibility study will examine streams within the upper Allegheny River watershed for the possibility of reconnecting them by removing dams, thus allowing repopulation with aquatic organisms in degraded areas. The study will also identify opportunities for wetland restoration within the watershed. Restoring connectivity will allow repopulation of native cold water fish species and nationally rare

(1 species) /endangered (5 species) mussels, while also contributing to improved habitat conditions which favor bald eagle and otter recovery.

Upper Mississippi River: The pending disposition study on the Upper Mississippi River highlights the need to ensure that the scope of disposition studies be broadly applied to systems rather than structures. In 2014 Congress directed the USACE to close the Upper St. Anthony Falls Lock after the public voiced concerned about the spread of invasive carp and it was revealed that traffic at the lock did not warrant continued investments. Initially, the St. Paul District only examined potential alternatives for the future management of Upper St. Anthony Falls. However, the closure of USAF is predicted to result in a drastic decline in commercial navigation at Lower St. Anthony Falls and Lock and Dam 1 because there is no longer an accessible destination for commercial navigation above Lock and Dam 1. As a result, the economic viability of continuing to operation and maintain Lower St. Anthony Falls Lock and Dam and Lock and Dam 1 and the associated navigation channel has been called into question. The St. Paul District is proposing to undertake a Section 216 study to investigate the future disposition or beneficial use of the three locks and two dams.

In addition to the future usage of the navigation structures, the disposition study could contribute to regional efforts to research restoration of native habitat and river functions within the Minneapolis gorge. Historically St. Anthony Falls was the head of a six mile stretch of rapids that was rich spawning ground for native fish capped by a 50 foot waterfall that was a natural barrier to upstream migration and if restored could be a natural barrier to invasive carp. The USACE disposition study of these structures should be informed by regional watershed restoration efforts and should incorporate regional research into the ecological and economic benefits that could be achieved by removal of the structures.

Recommendation: USACE should formally institute a watershed assessment and/or ecosystem restoration study as a component of the disposition study process. The disposition study guidance should provide instruction on methods to incorporate regional research and planning efforts into the study.

Thank you for the opportunity to provide comments on this important policy. We look forward to continue working with the USACE to restore the nation's rivers and streams.

Sincerely,



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