

**MEMORANDUM OF AGREEMENT
AMONG THE
THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION -
NATIONAL MARINE FISHERIES SERVICE, MARYLAND DEPARTMENT OF
NATURAL RESOURCES, AMERICAN RIVERS, DELAWARE TRIBE OF
OKLAHOMA AND MARYLAND HISTORIC PRESERVATION OFFICER
FOR THE
BLOEDE DAM REMOVAL PROJECT, HOWARD AND BALTIMORE
COUNTIES, MARYLAND
NMFS-HC-16-001**

WHEREAS, the National Oceanic and Atmospheric Administration - National Marine Fisheries Service (NMFS) and the Maryland Department of Natural Resources (DNR) are proposing the removal of Bloede Dam to restore a free-flowing riverine system for migratory and resident fish passage and to eliminate a documented public safety hazard within the Patapsco Valley State Park; and,

WHEREAS, the DNR is the owner of Bloede Dam in Howard and Baltimore Counties, Maryland, and agrees that the Dam be removed (Undertaking); and,

WHEREAS, American Rivers is proposing to assist DNR and hire a contractor (Contractor) for the removal of Bloede Dam and other work associated with the project to restore a free-flowing riverine system for migratory and resident fish passage and to eliminate a documented public safety hazard within the Patapsco Valley State Park; and,

WHEREAS, the NMFS has determined that its assistance to the Project through the Community-based Restoration Program is an undertaking subject to the requirements of Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations at 36 CFR Part 800 (Section 106); and,

WHEREAS, in accordance with the requirements of Section 106, NMFS has consulted with the Maryland State Historic Preservation Office (SHPO); and,

WHEREAS, NMFS has determined, in consultation with the SHPO, that the Bloede Dam is eligible for listing in the National Register of Historic Places under Criteria A, B, and C for its specialized engineering, innovative design, and association with early electrification, and Bloede Dam is recorded in the Maryland Inventory of Historic Properties as BA-1587; and,

WHEREAS, NMFS, in consultation with the SHPO, has determined that the removal of the Bloede Dam will have an adverse effect on historic resources; and,

WHEREAS, NMFS has consulted with American Rivers regarding the removal of the Bloede Dam and, because American Rivers has responsibilities assigned to it under the

terms of this Memorandum of Agreement (MOA), has invited American Rivers to be a signatory to this MOA; and,

WHEREAS, NMFS has invited the Advisory Council on Historical Preservation (ACHP) to participate in the consultation process, and in a letter dated September 30, 2014 the ACHP has determined that their participation to resolve adverse effects is not necessary; and,

WHEREAS, NMFS has contacted the Absentee Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe, and Delaware Tribe of Indians and to date these tribes have not indicated intent to participate in the consultation; and,

WHEREAS, NMFS, DNR and American Rivers have identified and consulted with the following parties in the Section 106 process: Delaware Tribe of Oklahoma, Patapsco Heritage Greenway, Friends of the Patapsco Valley Park, Howard County Historical Society, and Oella Company regarding the effects of the undertaking on historic properties and have invited these parties to comment on the MOA.

NOW THEREFORE, the NMFS, DNR, American Rivers, Delaware Tribe of Oklahoma and SHPO agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties:

Stipulations

The NMFS will ensure that the following measures are carried out:

I. Interpretive Signage

Four to six (4 to 6) exhibit panels (approximately 36" X 24" and comprised of a digital laminate composite) incorporating information from the Bloede Dam site documentation will be prepared by American Rivers, with assistance of a 36 CFR 61 qualified historian and the Delaware Tribe. The panels will focus on providing information on the historical significance of dam structure; however, additional information on the historical significance of the fishery, tribal cultures, and mill structures/complexes in the Patapsco Valley will also be considered. A draft of the panels will be provided to SHPO for review and comment. The panels will be located at the observation platforms included in Stipulation IV near the Bloede Dam site. The deadline for posting the signage will be four (4) years from the date of execution of this MOA. This deadline may be extended if agreed to in writing by the NMFS, SHPO, and American Rivers. All consulting parties will be notified when the interpretive signage has been posted, and the SHPO will be provided with photographs of the installed signage.

II. Interpretive Design Competition

American Rivers will conduct an interpretive design competition where a non-monetary award for a winning interpretive design will be presented. The purpose of the design competition is to generate ideas on ways to interpret the history of the dam, including documentation and research of the construction, innovative features and productivity of the dam and its contribution to the Patapsco Valley history.

American Rivers will establish an Interpretive Design Competition Committee consisting of key stakeholders including NOAA, DNR, Patapsco Heritage Greenway, local heritage partners and design professionals. The Committee, under the leadership of the American Rivers, will define a competition process, establish design entry guidelines and review entries to ensure they meet guidelines.

III. Documentation of Historic Properties

Prior to disassembly of the dam, American Rivers will complete written, graphic and photographic documentation for the Bloede Dam. The documentation will be in accordance with the National Park Service -- *Historic American Engineering Record (HAER) Guidelines* which can be found in the Federal Register, Vol. 48, No. 190, Thursday, September 29, 1983, pp. 44731-34. HAER combines drawings, history, and photographs to produce a comprehensive, multidisciplinary record that ranges in scope with a site's level of significance and complexity (Appendix A). The materials will be prepared in consultation with, and to the satisfaction of, National Park Service Historic Engineering Record staff and be sufficiently detailed to document the architectural, engineering and cultural values of the dam. Materials will be prepared by a qualified individual or staff meeting the "Secretary of the Interior's Professional Qualification Standards (48 FR 44 738-9) for "architectural history or historic architecture" and have demonstrated experience preparing archival documentation of dams and other historic structures. Documentation will be archived at the Library of Congress. American Rivers will submit draft documentation to the SHPO and the consulting parties for review and comment at least ninety (90) days prior to disassembly of the dam. Consulting parties, including SHPO, will have thirty (30) days to provide written comments on the draft documentation to American Rivers. American Rivers will submit final documentation to the SHPO for approval.

During disassembly of the dam, American Rivers, will complete 3D digital modeling of the dam structure, including the former superstructure. Digital Modeling is the process of creating a computer model of the dam that exactly replicates the form of the dam. Laser scanners will be used to capture the 3D data of the dam. The data will then be used to create a 3D model of the Bloede Dam structure. The model will include the internal

structure of the dam either through scanning or information contained in the dam as-built drawings. American Rivers will submit the model to the SHPO for review, comment and approval and to the other consulting parties for review and comment within ninety (90) days after disassembly of the dam.

The digital model will be used to recreate a scaled physical model for display at the Patapsco Valley State Park's Visitor Center or another appropriate location as agreed to by the signatories. In addition, the model and data collected as documentation of the Bloede Dam will be stored at the National Park Service and provided to interested parties, including Patapsco Heritage Greenway, for development of websites and historical information related to the dam history.

IV. Observation Platforms

NMFS, DNR and American Rivers will install two observation platforms. One platform will be located on the Howard County side of the Patapsco River along the terminal of the unimproved River Road Trail as shown in the Bloede Dam Removal construction plans. Additional details on the Howard County platform are included in the Bloede Dam Removal construction plans in sheets labeled: Observation Platform Design and Architectural Plans and Observation Platform Design Details.

The second observation platform will be located on the Baltimore County side of the Patapsco River along the Grist Mill Trail as shown in the Bloede Dam Removal construction plans. The Baltimore County observation platform will consist of viewing platform stepping off the side of the Grist Mill Trail of sufficient size to handle a small group of approximately 5-6 people, along with associated interpretive panels described in Stipulation I.

NFMS, DNR and American Rivers will submit final design plans to the SHPO and for review, comment and final written approval prior to construction of the observation platforms.

V. Historic Stone Wall

As depicted on the Bloede Dam Removal construction plans, Contractor will temporarily deconstruct the historic stone wall only where necessary for placement of the Baltimore County 42-inch sewer line. Prior to the deconstruction, Contractor will photo-document the historic stone wall adjacent to pedestrian bridge abutment. Photo-documentation is not to archival standards but for use in reconstruction of the wall and approval post-construction by SHPO. Contractor will carefully rebuild the stone wall using the original materials in the same general pattern matching the original undisturbed section of the stone wall. Contractor will refer to the

photo-documentation during the reconstruction. Grouting between stones, if deemed necessary, will appear original to the historic structure.

American Rivers will submit photo documentation of the original and rebuilt stone wall to the SHPO and for review, comment and approval within fourteen (14) days of the reassembly of the stone wall. SHPO will respond to American Rivers within thirty (30) days with approval of the final structure or recommendations for further repair. If SHPO provides no response within thirty (30) days, American Rivers can assume SHPO accepts the final structure.

VI. Unidentified Historic Properties

- A. In the event that previously unidentified archaeological resources are discovered during activities, American Rivers will order the discontinuation of all construction work involving subsurface disturbance in the area of the resource and in the surrounding area where further subsurface resources can reasonably be expected to occur and immediately notify NMFS, SHPO and the Delaware Tribe of the discovery.
- B. The NMFS, DNR, American Rivers, and the SHPO, or an archeologist approved by them, will inspect the work site without unreasonable delay and determine the area and nature of the affected archeological resource. Construction work may then continue in the area outside the archeological resource as defined by the NMFS and the SHPO, or their designated representative.
- C. Within ten (10) working days of the original notification of discovery, the NMFS, in consultation with the SHPO, will determine the National Register of Historic Places (NRHP) eligibility of the resource.
- D. If the resource is determined eligible for the NRHP, NMFS will prepare a plan for its avoidance, protection or recovery of information. NMFS and SHPO, in consultation with the Delaware Tribe, will approve such plan prior to implementation.
- E. Work in the affected area will not proceed until either:
 1. the development and implementation of appropriate data recovery or other recommended mitigation procedures, or
 2. the determination is made that the located resources are not eligible for inclusion on the NRHP.
- F. Any disputes over the evaluation or treatment of previously unidentified resources will be resolved as provided in the section of this MOA entitled Dispute Resolution.

VII. Coordination with the Maryland Historical Trust Act of 1985

The SHPO agrees that the fulfillment of the terms of this MOA will satisfy the responsibilities of any Maryland state agency under the requirements of the Maryland Historical Trust Act of 1985, as amended, State Finance and Procurement Article 5A-325 and 5A-326 of the Annotated Code of Maryland, for those components of the Project that require licensing, permitting and/or funding actions from Maryland agencies.

VIII. Dispute Resolution

A. Should any signatory to this MOA object within thirty (30) days to any actions proposed or carried out pursuant to this MOA, NMFS will consult with SHPO to resolve the objection. If the NMFS determines that the objection cannot be resolved, the NMFS will forward all documentation relevant to the dispute to the ACHP. Within thirty (30) days after receipt of all pertinent documentation, the ACHP will either:

1. Provide the NMFS with recommendations which the NMFS will take into account in reaching a final decision regarding the dispute; or

2. Notify the NMFS that it will comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any recommendations or comment provided by the ACHP will be understood to pertain only to the subject of the dispute; the NMFS responsibility to carry out all actions under the MOA that are not subjects of the dispute will remain unchanged.

B. If at any time during the implementation of the measures stipulated in this MOA, an objection should be raised by an interested member of the public or consulting parties, the NMFS will consult with the other parties to this MOA to determine the appropriate response. This MOA will not create any rights or responsibilities of any third party not a signatory hereto.

IX. Limitations and Assurances

This MOA is not a fiscal or fund obligating document and no funds are transferred hereunder. NMFS will ensure that American Rivers gains best professional estimates for all activities proposed in this undertaking. NMFS agrees to not proceed with the undertaking until American Rivers and project partners have obtained adequate funding, based on best professional estimates, to fulfill obligations under this MOA.

X. Duration

This MOA will continue in full force and effect until five (5) years after the date of the last signature to this MOA. Prior to such time, NMFS may consult with the other signatories to reconsider the terms of this MOA and amend it in accordance with Stipulation XI below.

XI. Amendments

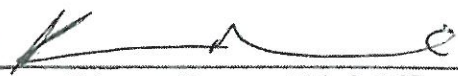
This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date of the last signature to the amendment.

XII. Termination

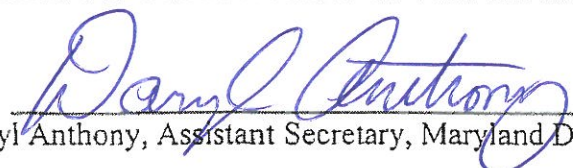
- A. If any signatory to this MOA determines that its terms will not or cannot be carried out, that party will immediately consult with the other parties to attempt to develop an amendment per Stipulation XI, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.
- B. In the event that the MOA is terminated, NMFS will either execute an MOA with signatories pursuant to 36 CFR 800.6 (c) or request the comments of the ACHP under 36 CFR 800.7 (a).

Execution of this MOA by NMFS, DNR, American Rivers, Delaware Tribe of Oklahoma and SHPO and its subsequent filing with the ACHP, and implementation of its terms evidences that NMFS has afforded the ACHP an opportunity to comment on the removal of the Bloede Dam, and that NMFS has taken into account the effects of the undertaking on historic properties.

NATIONAL MARINE FISHERIES SERVICE

By:  Date: 10/7/2015
Shannon Dionne, Deputy Chief, Office of Habitat Conservation, National Marine Fisheries Service

MARYLAND DEPARTMENT OF NATURAL RESOURCES

By:  Date: 10/22/2015
Daryl Anthony, Assistant Secretary, Maryland Department of Natural Resources

AMERICAN RIVERS

By: *Kristin May* Date: 10/28/15
Kristin May, Chief Financial Officer, American Rivers

DELAWARE TRIBE

By: *Chris Brooks* Date: 12-21-2015
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MARYLAND STATE HISTORIC PRESERVATION OFFICER

By: *Elizabeth Hughes* Date: 1-15-16
Elizabeth Hughes, State Historic Preservation Officer, Director, Maryland
Historical Trust

Appendix A: Guidance on Deliverables for Level I HAER documentation of Bloede Dam.

1. Measured drawings (4-6 sheets)

- Title page: title, drawing or historic view of structure, brief site history, project credits, site location map(s)

Existing condition drawings:

- Site Plan: including topographic information and fish ladder
- Floor Plan
- Short and long section
- Elevation
- Isometric

Historic Condition drawing(s):

- Plan/Section/Isometric: depicting historic intake/turbines/motor houses, depending on documentation available

2. Large format photographs (6-10 views)

Archival, large format photographs should be produced to HAER Standards

Suggested views include:

- general view(s) of site to illustrate setting
- front elevation of dam
- perspective view(s), from both front and rear
- interior view looking through all bay openings
- interior view of typical bay
- extant equipment, structural details

3. Historical Report (15-30 pages)

A HAER historical report should be produced in outline format to HAER Standards to discuss the physical history of the Bloede Dam, including its historical context. The second section considers design and structural information, including construction history and mechanics, such as the intakes, penstocks, turbines, of the former hydroelectric generation plant. A bibliography should be included to list sources of information and other potential sources not investigated, if appropriate. Historical images may be included as part of an illustrated appendix, along with a signed copyright release form.