



Save the Middle Savannah River

BETTER FOR THE RIVER. BETTER FOR US.

NEW SAVANNAH BLUFF LOCK & DAM AND FISH PASSAGE PROJECT:

A NEW CONSENSUS SOLUTION

Offered by Augusta/North Augusta-area Stakeholders

September 10, 2019

The Problem

The WIIN Act Rock Weir alternatives studied by the Corps of Engineers fail to meet the technical requirements that Congress included in the WIIN Act. They are all entirely unworkable — because the pool cannot be lowered and the flood levels cannot be raised. Further, all of the alternatives considered so far would impose unnecessary and unreasonable technical, economic, human health, safety, and environmental risks on the citizens, businesses and municipalities of the Central Savannah River Area (CSRA). Moreover, the Corps has not shown that any of the plans will safely pass the targeted species of fish.

The Risks

According to the Corps' *Savannah Harbor Expansion Project, Georgia and South Carolina, Fish Passage at New Savannah Bluff Lock and Dam: Integrated Post-Authorization Analysis Report and Environmental Assessment* report (the Draft Report), the Rock Weir alternatives could . . .

- Cost more, as much as twice the cost, or more, of repairing the Lock and Dam and constructing a fish bypass;
- Lower the river pool (notwithstanding the WIIN Act's direction to the contrary), as demonstrated by the Corps' river drawdown test in February 2019;
- Potentially cause increased flood risks (in spite of FEMA regulations prohibiting raising the flood level);
- Increase fluctuations of water levels in the pool;
- Result in permanent loss of river navigation;
- Reduce access to the river from adjacent properties;
- Cause siltation and debris buildup;
- Include temporary loss of the pool during weir construction; and
- Impose an uncertain environmental and economic future for the CSRA on both sides of the river.

The Responses

Reactions from CSRA citizens, businesses, and local and state governments have mostly been negative — from skeptical to angry — represented by at least 346 comment letters submitted to

the Corps during the public review period on the Draft Report. Senators and Congressmen from both states have decried the proposed effects on the river in their joint letter dated April 9, 2019. South Carolina has passed legislation limiting the permitting for the project and has budgeted funds for a possible lawsuit.

In spite of these and other strong reactions, the Corps is still pursuing implementation of a full-river rock weir option.

The Independent Expert Panel Review

It has recently come to light that an Independent Expert Panel Review (IEPR) has been conducted by the Corps (as required by law to “ensure that the quality of published information meets the standards of the scientific and technical community”). The independent subject matter experts issued a report of their findings (the IEPR Report), which mirrors many of the comments previously submitted by locals. It states that none of the options in the Draft Report maintains the pool, as required by the WIIN Act. Important to the success of the Savannah Harbor Expansion Project (SHEP), the IEPR Report raises serious questions about whether any of the Corps plans will safely pass fish at all, either upstream or downstream.

Some of the expert comments contain ideas for solutions that could be married with other alternative solutions that have previously been proffered locally. Most promising are Comments 3 and 13 of the IEPR report, which states that the Draft Report “does not consider alternatives that provide a smaller fishway with a discharge capacity less than the low end of the normal flow range, while retaining the operation of the spillway gates to maintain the upstream pool level and provide adequate discharge capacity for higher flows”; and which recommends consideration of “Alternatives with smaller-sized fishways that rely on the discharge from an adjacent spillway gate to provide supplemental attraction flow to draw migrating fish to the fishway entrance.” Comment 13 includes illustrations of a narrowed fishway and an aerial view of an example site where such a fishway has been actually constructed. These illustrations are reproduced below:

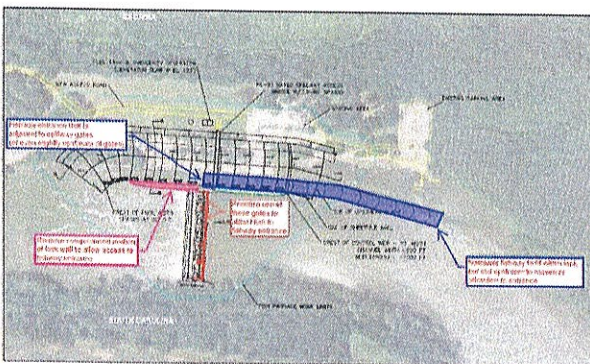


Figure 1 IEPR narrow fishway, Georgia side.

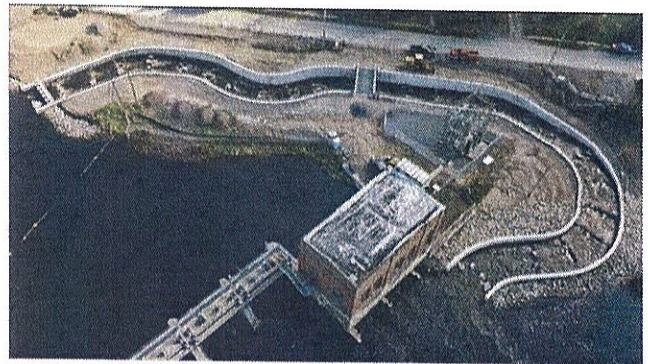


Figure 2 IEPR fishway example (Lenney, 2018)

Figure 2 provides an aerial view of an example project that was designed and constructed to pass sturgeon, and which is similar to the New Consensus Solution (proposed herein).

Proposal: A New Consensus Solution

Fortunately, these new ideas have led to formulation of a proposed **New Consensus Solution** that would move fish, maintain the pool, and avoid flooding and the other risks. It would thus align the environmental mitigation requirements of the Savannah Harbor Expansion Project (SHEP) with most of the goals of the Corps of Engineers, NOAA Fisheries, the Consortium for the Lock and Dam and the vital interests of both the Central Savannah River Area (CSRA) businesses and the broader Middle Savannah River communities under a new consensus, workable plan, at a reasonable cost, if not a substantially lower cost than the other solutions.

The solution includes the following major components:

- **Rehabilitate the Lock and the Dam** for WIIN Act purposes, navigation, water supply, and recreation, and for flood regulation;
- **Construct a Narrowed Fishway around the Lock and Dam on the South Carolina side**, built immediately adjacent to the attractive flows of the gate closest to the South Carolina bank (similar to the IEPR fishway example in Figure 2), designed to pass less than 3,600 cfs, and scientifically proportioned to warrant success for passing sturgeon and other migratory fish;
- **Retain the Lock and lock wall** for possible future adaptive management measures, if needed;
- **Adapt the Lock to enhance fish passage success**, if needed;
- **Evaluate localized spawning habitat enhancement projects** for endangered species downstream;
- **Retain the New Savannah Bluff Lock and Dam Park** for recreation (and possible future recreational water features); and
- **Provide for operation and maintenance of the project** (possibly joint) in the future.

The “New Consensus Solution” would respect both science and law. It would benefit both SHEP and the Middle Savannah River Communities. Repairing the Lock and Dam and constructing a modest fishway is the most cost effective, practical, workable, and protective solution that serves all needs.

More specifically, the proposed “New Consensus Solution” beneficially . . .

- 1) **Maintains a steady pool for water supply** to the cities of North Augusta, SC and Augusta, GA and to important industrial users;
- 2) **Maintains pool regulation at Elevation 114.5 and minimizes flood conditions** for residents, businesses, and industrial plants above the Lock and Dam, consistent with the law and the letter of the Senators and Congressmen;
- 3) **Preserves the navigability** of the Savannah River from Savannah to the cities of Augusta and North Augusta;
- 4) **Provides an improved fish passage** that provides mitigation to the negative impacts of Savannah Harbor Expansion Project (SHEP);

- 5) *Prevents siltation and debris buildup* in the pool;
- 6) *Minimizes environmental effects* during construction;
- 7) *Preserves the gravel bar downstream* of the Lock and Dam as spawning habitat;
- 8) *Preserves the Lock and Dam* park;
- 9) *Leaves open the feasibility for a future whitewater feature*, if desired;
- 10) *Rehabilitates historic facilities* eligible for listing in the National Register of Historic Places;
- 11) *Offers an opportunity for hydro-electric power generation* to defray operation and maintenance costs;
- 12) *Costs the least*; and
- 13) *Is readily permittable*.
- 14) *Can be constructed in phases*.

Public Support

Support for this solution is currently being sought from public bodies and individual residents.

Action Needed to Save the Middle Savannah River

Support legislative action and rapid implementation of the proposed “New Consensus Solution.”

Circulate this **New Consensus Solution** paper widely.

For more information visit <https://www.savethemiddleriver.com>



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