

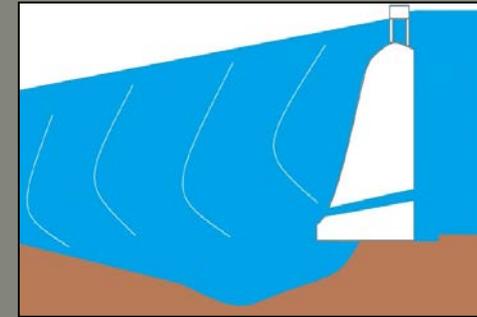
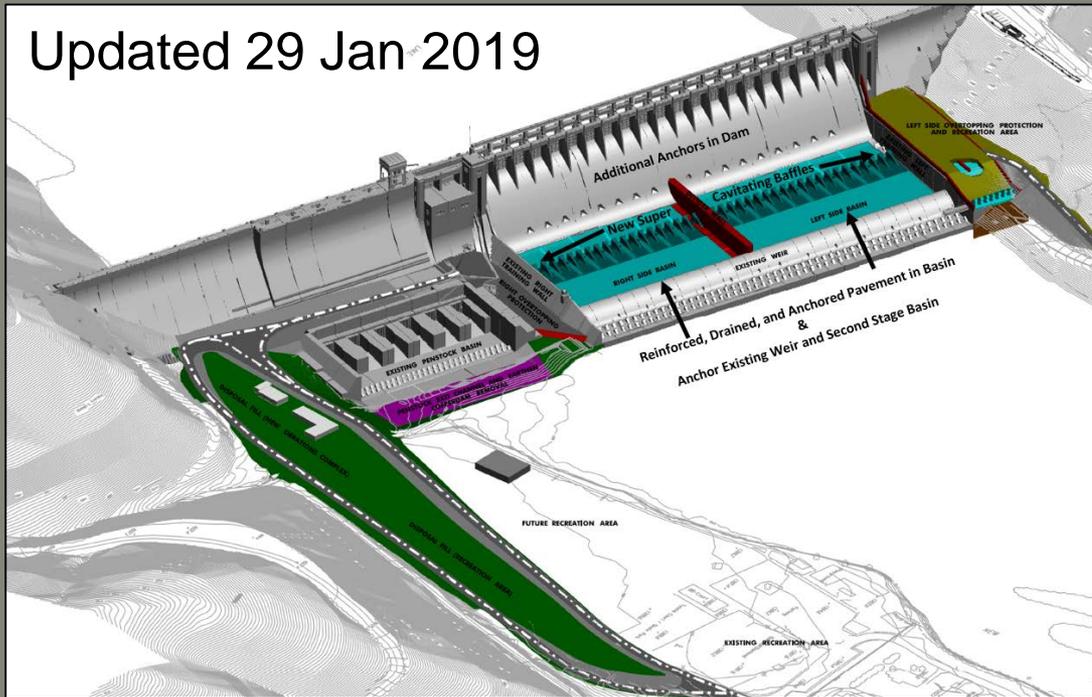
BLUESTONE DAM

PROPOSED PHASE 5 OVERVIEW

NATIONAL INVENTORY OF DAMS ID: WV08902

EXPECTED TO BE
ADVERTISED IN 2019!

Updated 29 Jan 2019



BluestoneDamDSA@usace.army.mil

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



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WHERE IN THE WORLD IS BLUESTONE?



- Bluestone Dam is on the New River, just upstream of the Greenbrier River.
- Bluestone Dam controls a watershed nearly the size of Connecticut
- The New River is renamed the Kanawha River at Gauley Bridge, WV.
- Bluestone works with Summersville & Sutton Dams to reduce flood risk along the New & Kanawha River valleys all the way to Point Pleasant and down the Ohio River.
- 1/2 the water that passes Charleston, WV comes through Bluestone Dam.

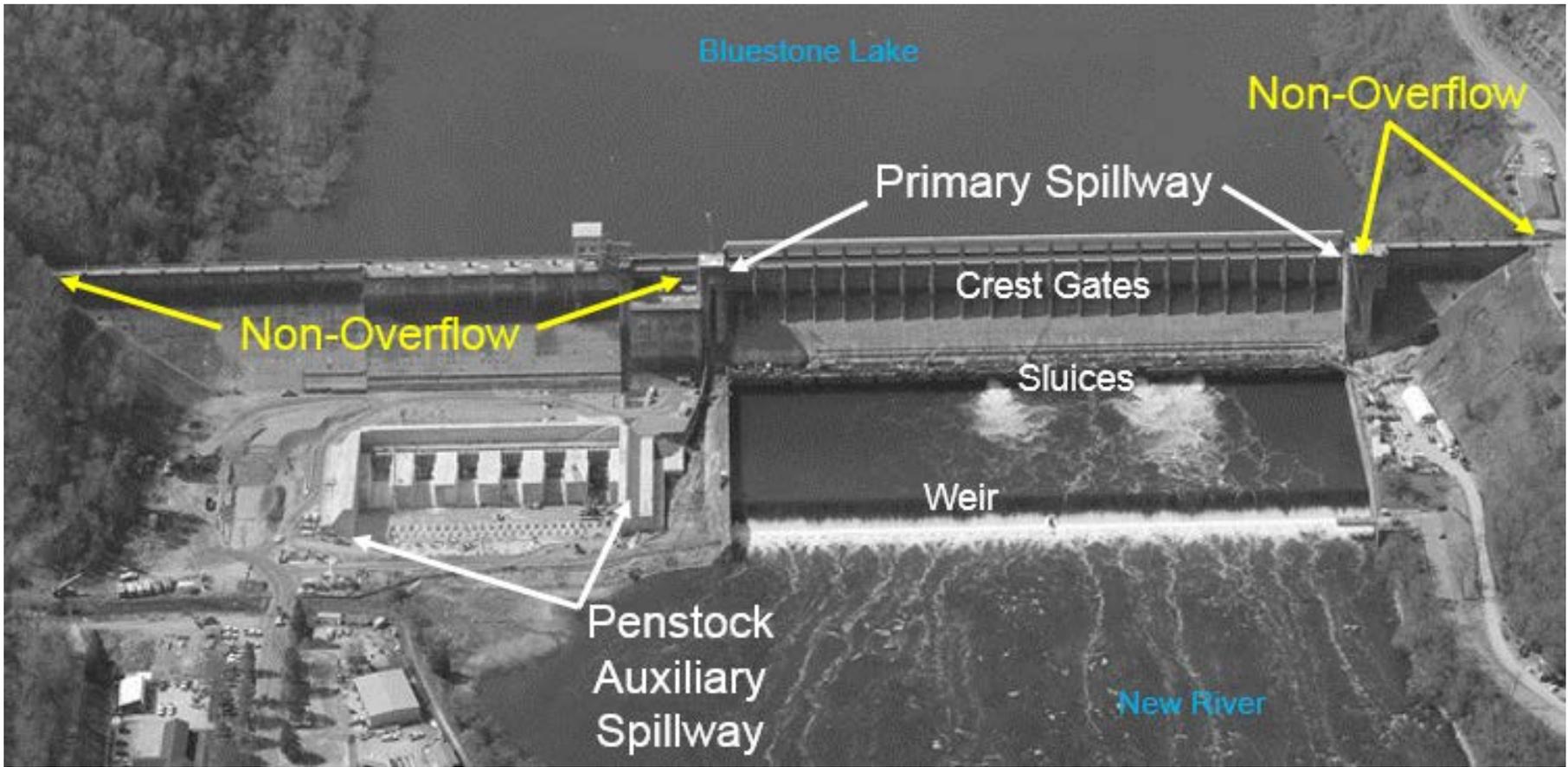
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WHAT IS BLUESTONE DAM?



- Bluestone Dam is a Straight Concrete Gravity Dam
- Bluestone Dam is approximately 165 feet high
- Bluestone Dam is nearly ½ mile long
- Bluestone Dam impounds an 11 mile long lake on the New River

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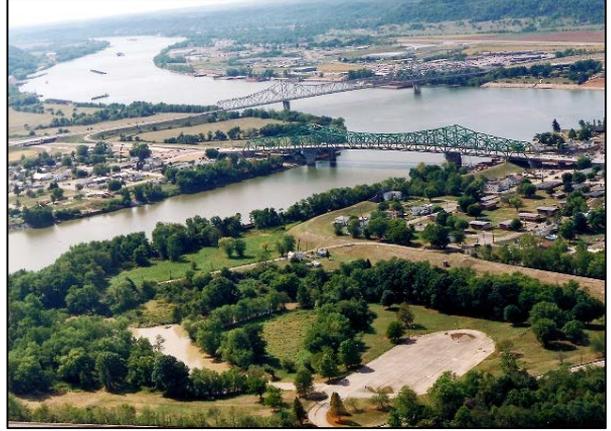
WHERE DOES BLUESTONE DAM REDUCE FLOOD RISK?

\$5.9B Cumulative Damages Prevented Though-out the New & Kanawha River Valleys

Hinton to Montgomery to Industry



Charleston to John Amos to Pt. Pleasant



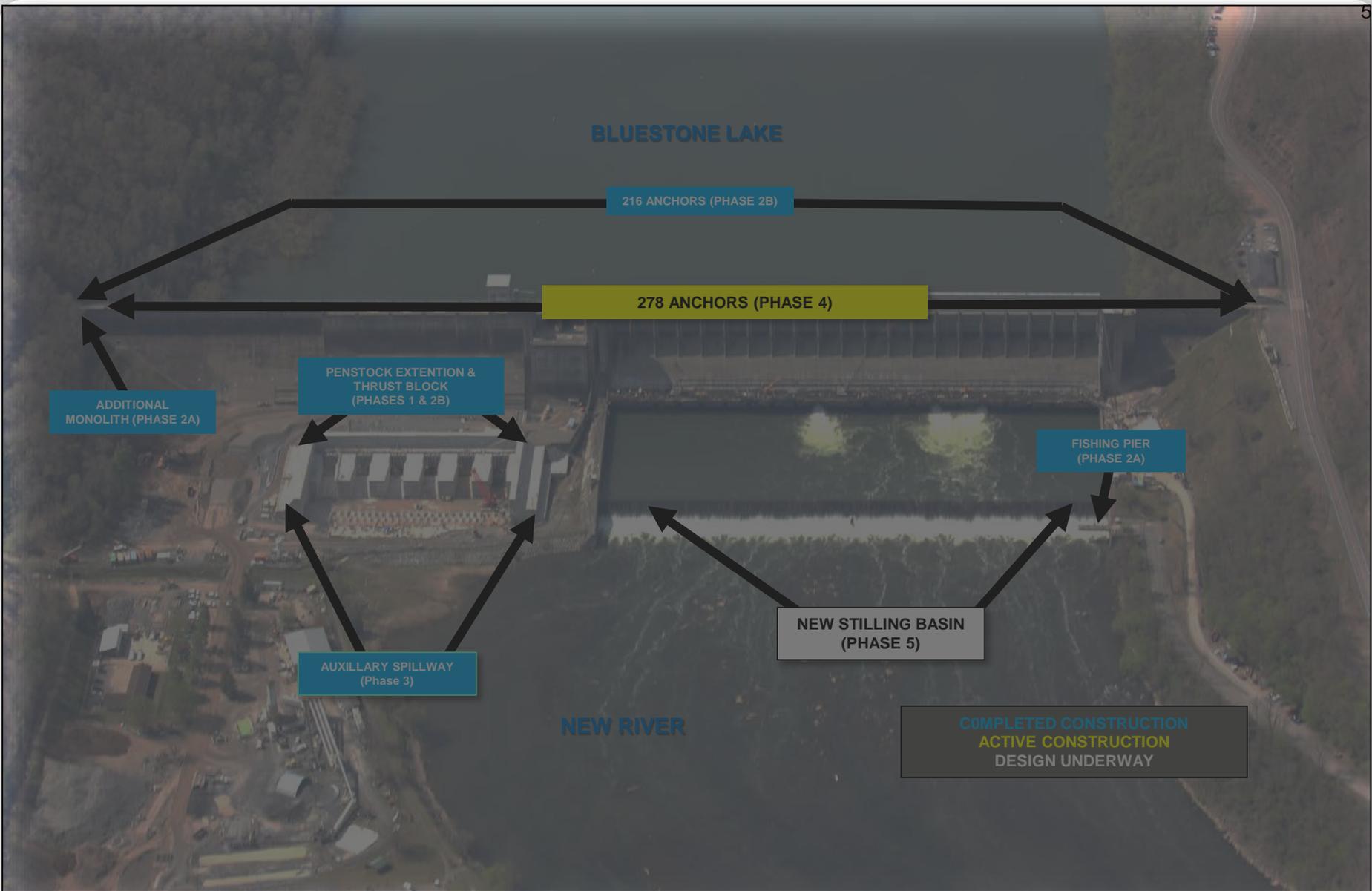
And beyond on the Ohio River..

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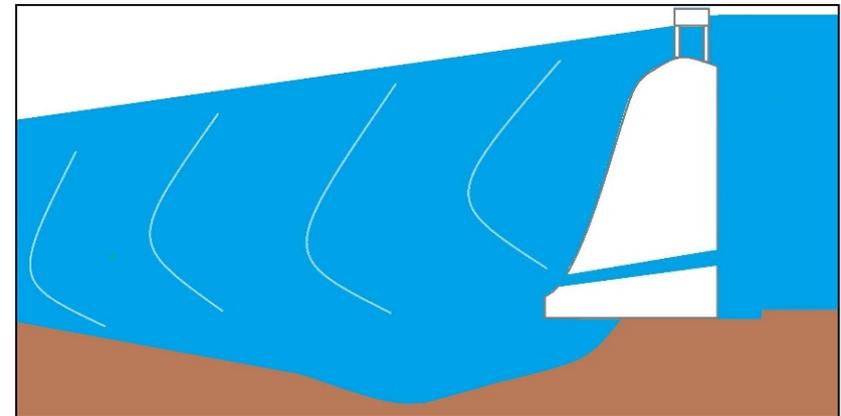


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2017 SUPPLEMENTARY STUDY TO ADDRESS SCOUR OF PRIMARY SPILLWAY

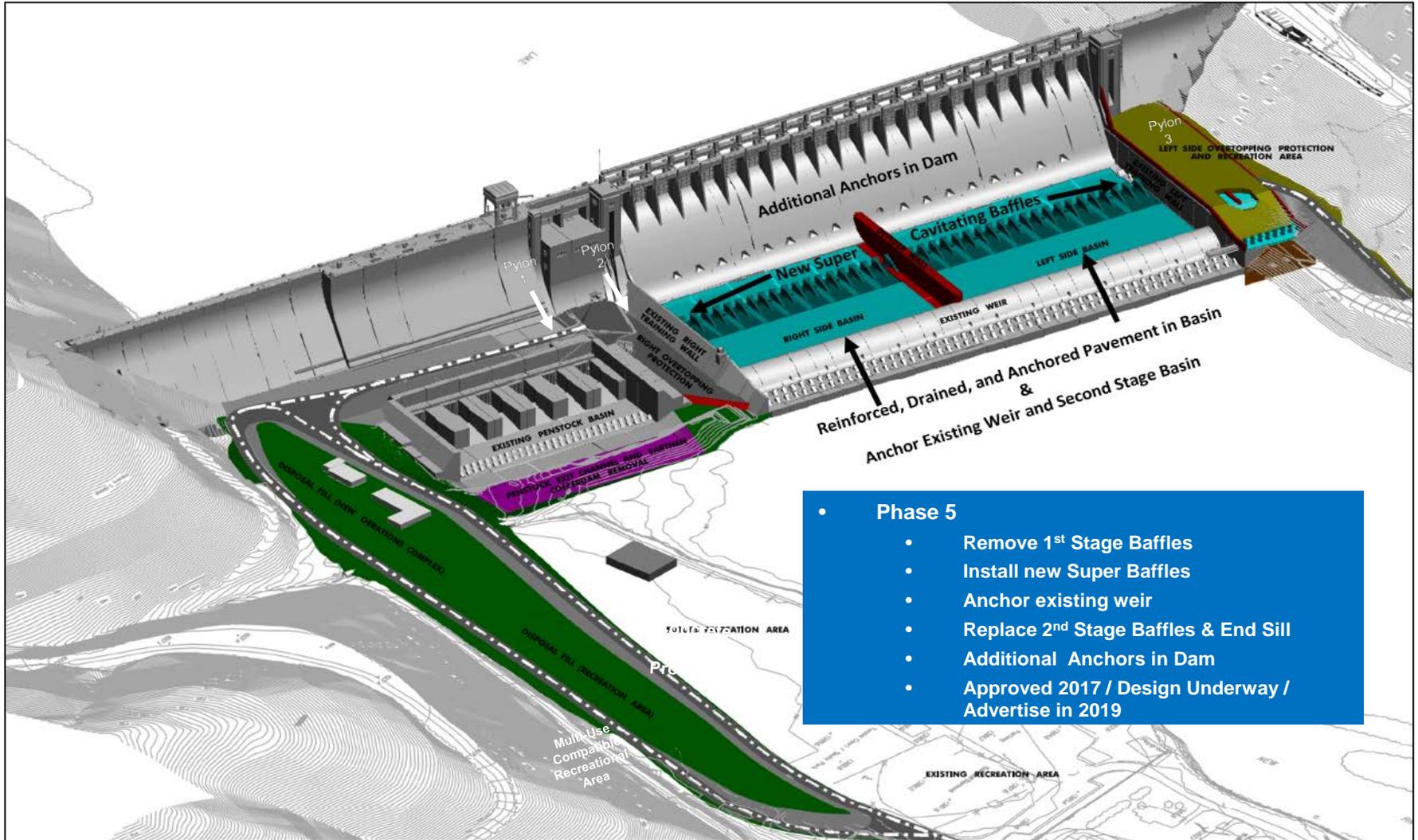
- Potential scour of rock in primary spillway leading to breach
- This could result in a significant loss of life risks
- Study approved 2017; design underway
- The result will be additional construction



Rock can scour during spillway flow and undermine the dam's foundation



BLUESTONE DAM: PROPOSED PHASE 5 INVESTMENT



- Phase 5
 - Remove 1st Stage Baffles
 - Install new Super Baffles
 - Anchor existing weir
 - Replace 2nd Stage Baffles & End Sill
 - Additional Anchors in Dam
 - Approved 2017 / Design Underway / Advertise in 2019

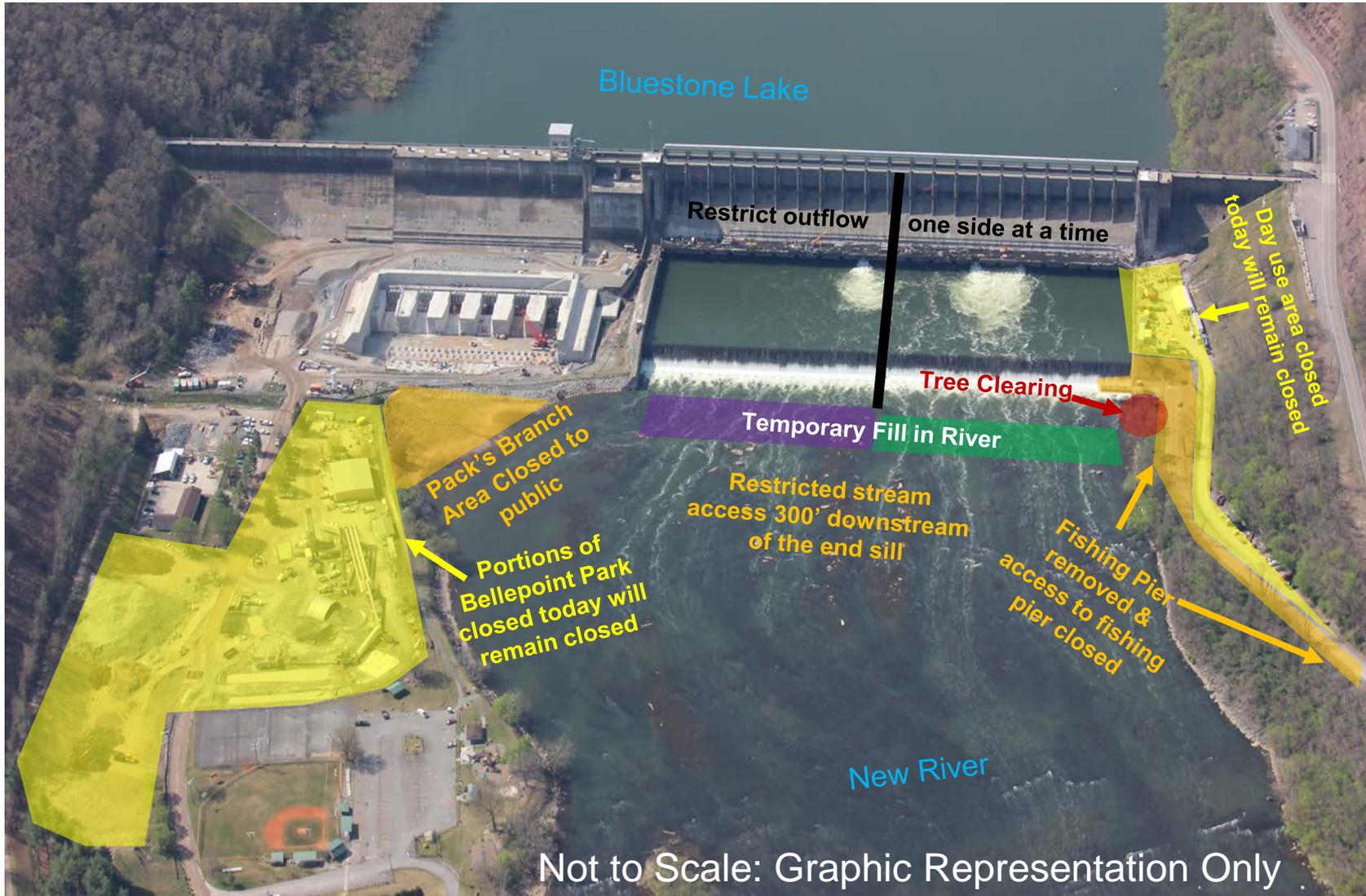


PROPOSED PHASE 5 CONSTRUCTION ACTIVITY HIGHLIGHTS

- Similar Construction work limits as previous work
- Construction Access: State Road 20, Miller Avenue (9am-2pm, M-F for construction hauling), existing upstream access roads
- Primary spillway will be bisected to construct new basin $\frac{1}{2}$ at a time.



PROPOSED PHASE 5 POTENTIAL IMPACTS



- Community outreach
- Best Management Practices to minimize water quality impacts
- Vehicle maintenance and dust suppression
- Traffic controls (flagmen, signage, etc.)
- Truck traffic through residential areas limited to M-F, 9am-2pm
- Minimize tree cutting and avoid bird nesting season
- Boat decontamination to minimize invasive mussel introduction
- Cofferdam/Causeway built during low-flow



PROPOSED PHASE 5 MITIGATION FOR UNAVOIDABLE IMPACTS

- Replacement access point for downstream fishing
- Replacement of existing ADA-accessible pier after construction is complete
- Restoration of disturbed fish habitat within cofferdam/causeway footprint
- Off-site aquatic restoration



PROPOSED PHASE 5, WHAT'S NEXT?

12

- Summer / Fall 2019: Advertise Phase 5





SEND QUESTIONS TO

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