

Jim Hinkle/Spring River SFH
Engineering Services Request

“Our Dam Problem Is Fixed”

ARKANSAS GAME &
FISH COMMISSION



Keeping the Natural State natural.



- Jim Hinkle/Spring River SFH is located on an island in the middle of the Spring River below Dam 3.
- Dam 3 was built in the early 1900's for hydropower but was discontinued in 1972.
- Two inlets cut in the dam supply 75,000 gpm of gravity flow water to the hatchery.
- AGFC is responsible for the maintenance and operation of Dam 3.

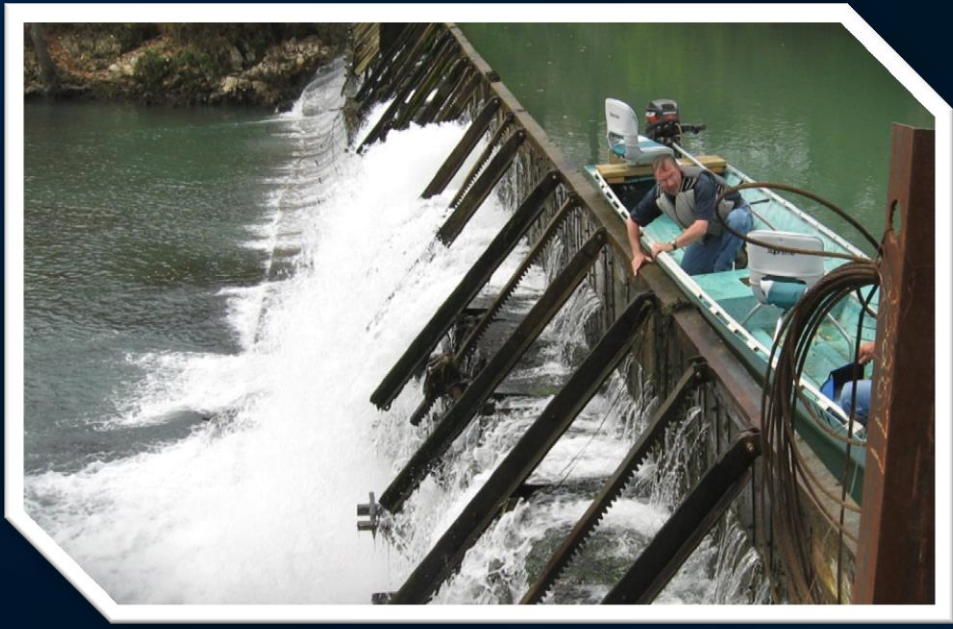


Dam 3 with gates in upright position

2004



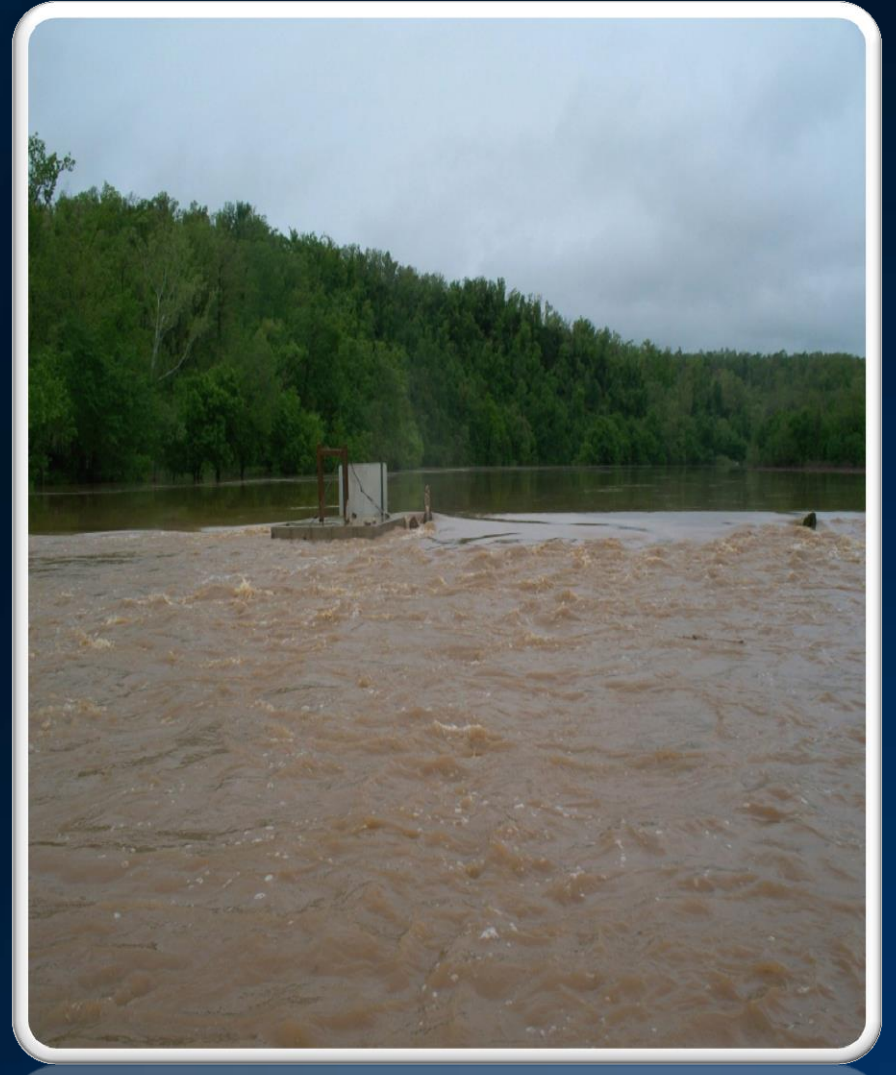
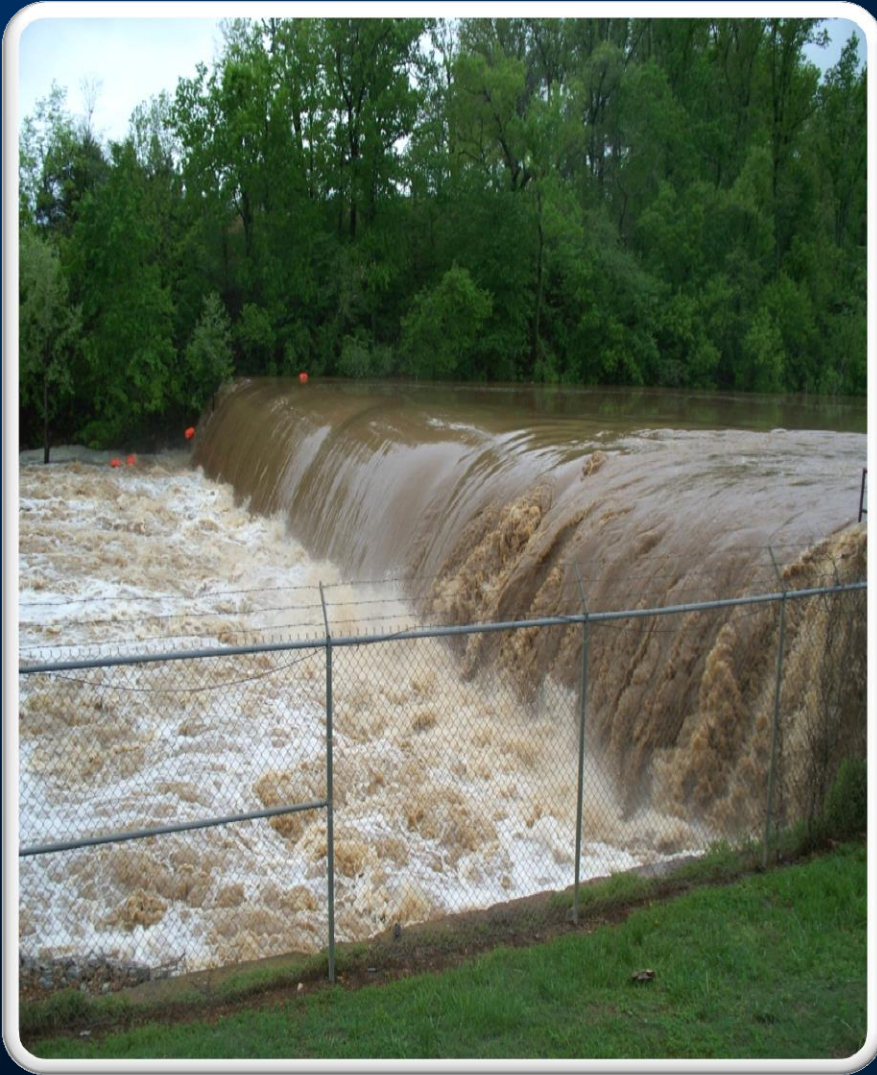
2007



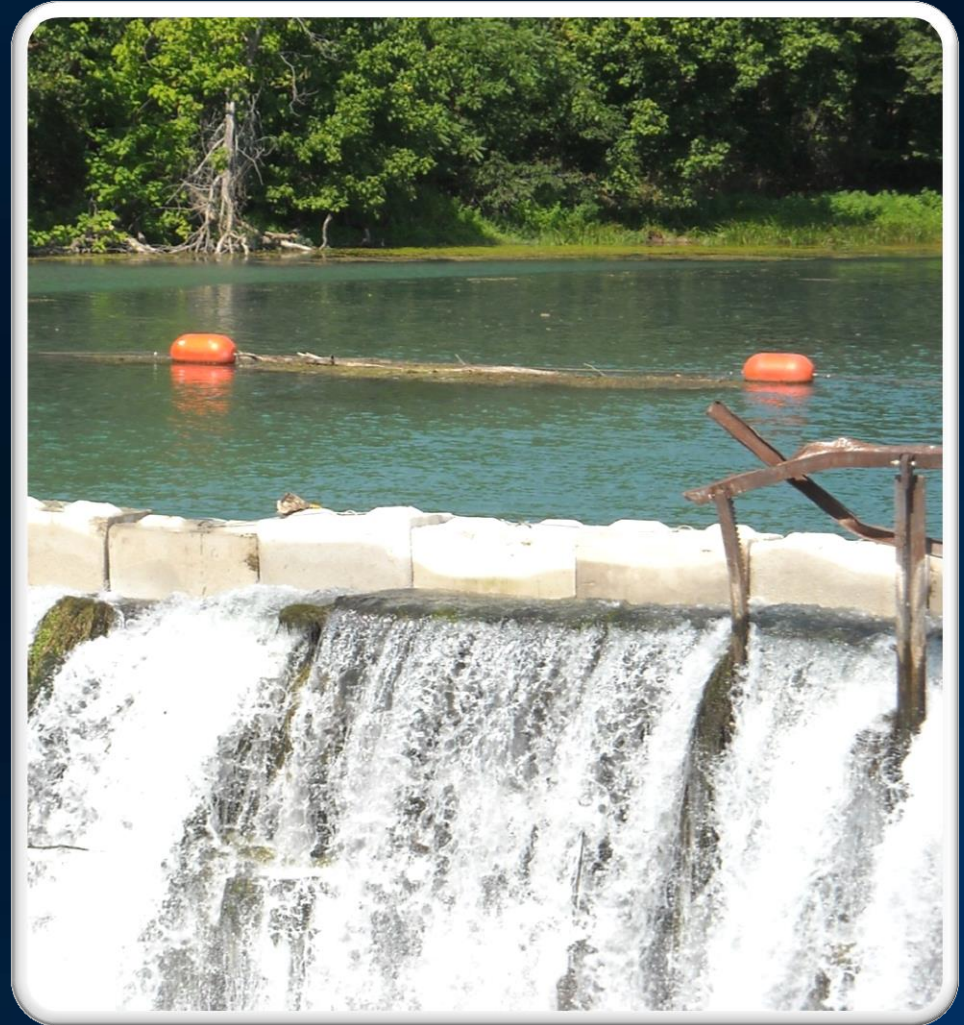
2009



Easter 2011 Flood



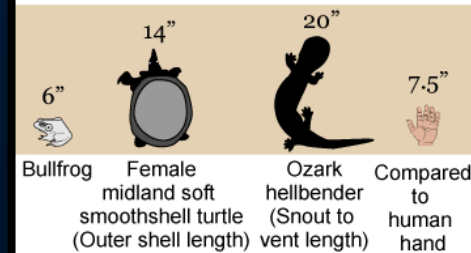
Temporary Fix Photos



Ozark Hellbender



The Ozark hellbender is bigger, on average, than some other common Missouri amphibians and reptiles.



Ozark hellbender population in some Missouri rivers

- Current River**
↓ 64% over 14 years
- North Fork of White River**
↓ 83% over 33 years
- Eleven Point River**
↓ 93.5% over 17 years

Hellbenders have a rudder-like tail, but they rarely swim ...

The front legs have four toes while the hind legs have five.

... instead they walk slowly along the stream bottom using their short legs.

Their flat body shape (top to bottom) helps them move in fast-flowing waters.

Hellbenders breathe by absorbing oxygen from water through the folds on their skin.

Hellbender's favorite food: 90 percent of the hellbender's diet consists of crawfish.



The Ozark hellbenders are fully aquatic animals. They cannot survive on land.

Sources: MISSOURI DEPARTMENT OF CONSERVATION, U.S. FISH & WILDLIFE SERVICE

SPRING RIVER DAM #3 IMPROVEMENTS

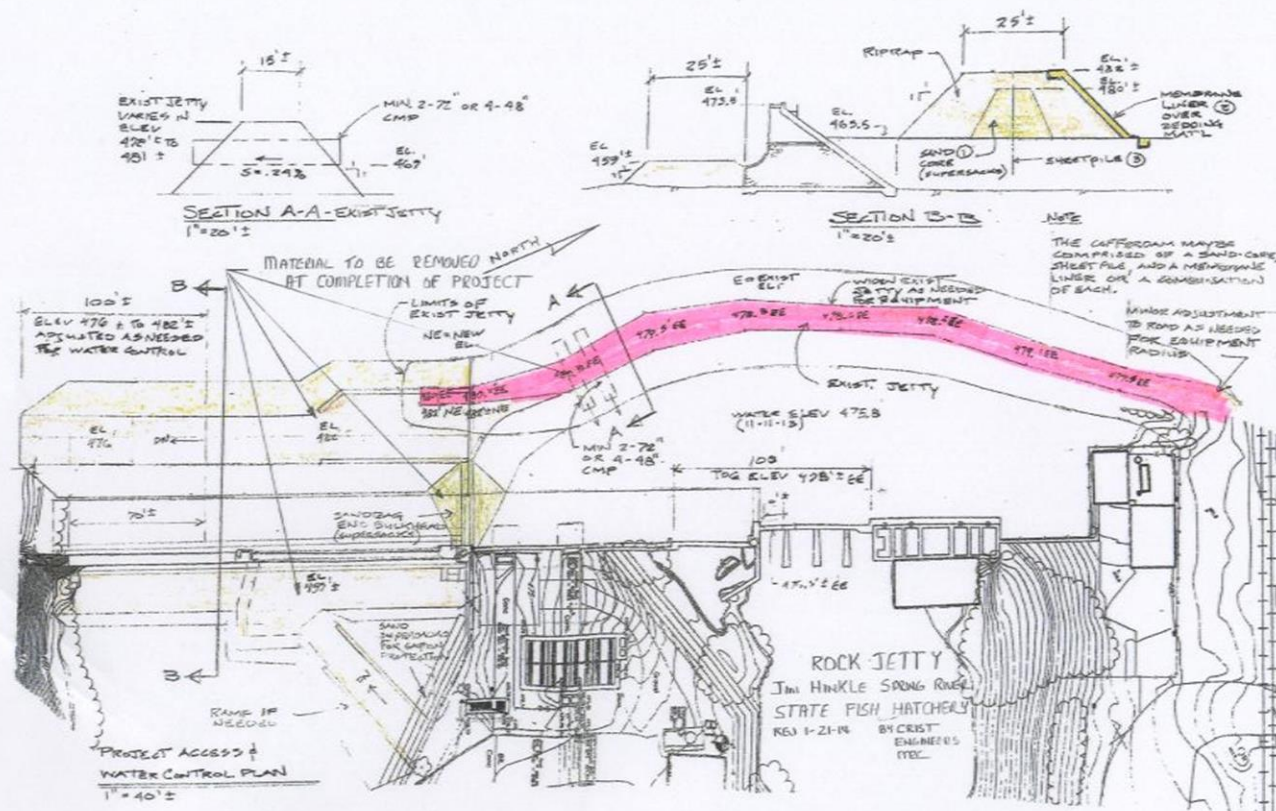
Jim Hinkle Spring River
State Fish Hatchery



Keeping the Natural State natural.



Water Management Plan



Cofferdam Under Construction



Cofferdam Under Construction cont.



Temporary Bridge Installation

ABUTMENT CONSTRUCTION



TEMPORARY BRIDGE PLACED



Cofferdam Breach – 04-30



Spring River Diversion



Cofferdam Completion



Super Sack Bulkhead Placement



Cofferdam and Bulkhead Complete



Existing Dam Condition



Dam Base Pressure Grouting



Mass Concrete Placement in Cells





Vegetation Harvest 08-04





Vegetation Harvest 08-04 continued



Vegetation Field 08-13



Dam Crest Removal



Dam Crest Concrete Placement



Obermeyer Gate Installation



Flash Flood 09-11





The Aftermath – Gates Raised 3/4



SPH Dam 3 video.MOV



Obermeyer Gates Operated





Substantial Completion



Control House



Demobilization



Diversion Channel Normal Flow

