



November 29, 2016

Certified Mail: 7012 0470 0001 4557 6858  
Return Receipt Requested

Ms. Sarah Clem  
Branch Manager, Water Division  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

RE: Southwestern Electric Power Company  
Flint Creek Power Plant  
Permit Number: AR0037842; AFIN : 04-00107  
Request to Delist Lake SWEPCO from 303(d) List

Dear Ms. Clem:

Southwestern Electric Power Company and American Electric Power (AEP/SWEPCO) is requesting Lake SWEPCO be removed from the ADEQ Draft 2018 Impaired Waterbodies, 303(d) List.

On March 3, 2014, AEP/SWEPCO submitted extensive turbidity analytical data pertaining to Lake SWEPCO with a request for delisting of the waterbody. This request was denied because ADEQ believed fish health information was required in support of the request. AEP/SWEPCO subsequently contacted the Rogers Office of the Arkansas Game and Fish Commission (AG&FC), and received the following reports:

- Stein J. and K. Hopkins; SWEPCO Lake, Benton County, 2015 Annual Fish Population Sampling Report; July 25, 2016; and
- Stein J. and K. Hopkins; SWEPCO Lake, Benton County, 2016 Annual Fish Population Sampling Report; October 27, 2016.

Review of the AG&FC reports (attached) do not indicate a health problem with the fish in Lake SWEPCO. The reports do indicate a healthy fish population in the lake. In fact, Mr. Ron Stein indicated in his communication to Randy Solomon of my staff that Lake SWEPCO was, "one of the best big bass lakes" in Northwest Arkansas.

AEP/SWEPCO believes the combined turbidity data submitted March 3, 2014 and the AG&FC reports support delisting of Lake SWEPCO from the 303(d) list. Should ADEQ determine additional analyses of water samples are required prior to delisting the lake, AEP/SWEPCO would like to be notified so that we may collect duplicate samples for evaluation.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Should you have any questions, please call Randy Solomon at 214-777-1043

Respectively,



Bruce W. Moore, P.E.  
Manager, Air and Water Quality Services

C: Carl Handley, II (ec)  
Scott Carney (ec)  
Randy Solomon  
Bryan Leamons – ADEQ  
File: FLC.180.05.2016

**Southwestern Electric Power Company**

**Flint Creek Power Plant**

**Arkansas Game and Fish Commission**  
**SWEPCO Lake, Benton County, 2015 Annual Fish Population Sampling Report**  
**Jon Stein, District 1 Fisheries Supervisor**  
**Kevin Hopkins, District Fisheries Biologist**  
**July 25, 2016**

# **SWEPCO Lake**

**Benton County**

## **2015 Annual Fish Population Sampling Report**



**Jon Stein, District 1 Fisheries Supervisor  
Kevin Hopkins, District Fisheries Biologist**

**July 25, 2016**

Approved: \_\_\_\_\_

Ben Batten  
Assistant Chief/Management

**SWEPCO LAKE FISHERIES INVESTIGATIONS**  
**2015 ANNUAL REPORT**  
**Executive Summary**

SWEPCO Lake is a 215-hectare lake in Benton County. This reservoir is an impoundment of Little Flint Creek located outside of Gentry. It is operated by the Southwestern Power Administration for electric power generation. It is unique among Arkansas lakes; surface temperatures remain high all year due to heated effluent from a coal burning power plant. Surface temperature generally ranges from 43 C (109 F) during the summer to about 18 C (65 F) during winter. During the two-week period that the plant is shut down during midwinter, temps as low as 6 C (43 F) have been noted. Initial stocking and operation of the power plant was in 1978. Spillway elevation is 347.6 meters (1140 ft.) msl. It has an average depth of 9.8-m (32-ft.) and a maximum depth of 27.5-m (90-ft.). The lake has largemouth bass creel of 10, which only one may exceed eighteen inches. The lake receives quite a bit of fishing pressure during the winter months due to its heated effluent and is also popular among tournament anglers.

SWEPCO Lake was evaluated by standard springtime electrofishing in 2015: a nighttime electrofishing sample on January 27th.

Largemouth bass abundance was good with a catch rate of 139 stock sized bass per hour of electrofishing. Weather was extremely cold during the sample leading to very clear water. Secchi disk reading was 6 meters and we did not get a good sample of larger fish as evidenced by the PSD being 64 and PSD-P of 8. We know there is a good population of larger largemouth bass in Lake Swepco based on previous years sampling and tournament catches. The larger bass were located too deep to effectively sample with electrofishing gear.

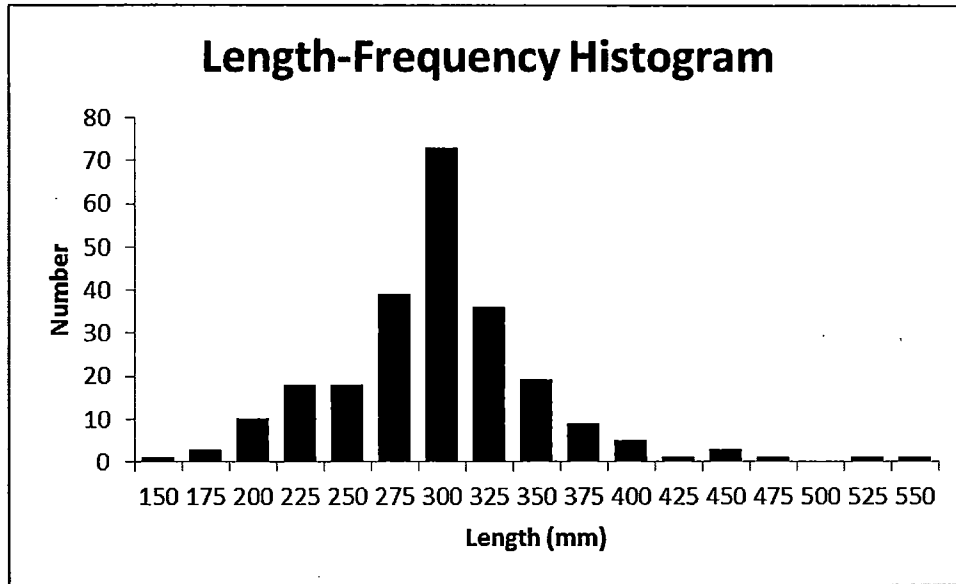
According to personal observations in the sample, it appeared that catch was dominated by smaller male bass. The majority of fish sampled ranged from eight to fifteen inches (Figure 1). However, we did catch one fish that was in the six-pound range.

Recommendations include sampling the largemouth bass population every year. We will periodically look at water temperatures and water clarity to get a better sample of the bass population. The best largemouth bass samples occur when water temperatures range from 12.7-18.3 Celsius (55-65 F) and secchi readings are 1-3 meters.

Table 1. Largemouth Bass Population Structure (2013-15)

Year	Catch per Hour (> stock)	PSD	PSD-P
2013	197	47	19
2014			
2015	139	64	8

Figure 1. SWEPCO Lake Largemouth Bass Length Frequency



## RECOMMENDATIONS

1. Continue to sample every year to monitor the bass population.

CC: Captain Brian McKinzie  
Lieutenant Bill Ruby  
Wildlife Officer Cal Gunter

**Southwestern Electric Power Company**

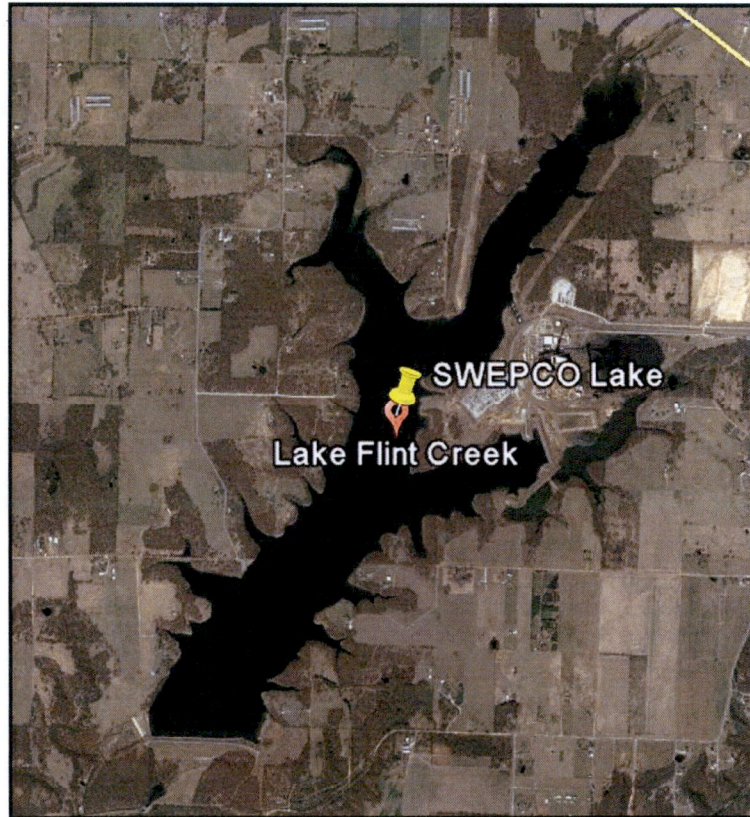
**Flint Creek Power Plant**

**Arkansas Game and Fish Commission  
SWEPCO Lake, Benton County, 2016 Annual Fish Population Sampling Report  
Jon Stein, District 1 Fisheries Supervisor  
Kevin Hopkins, District Fisheries Biologist  
October 27, 2016**

# **SWEPCO Lake**

**Benton County**

## **2016 Annual Fish Population Sampling Report**



**Jon Stein, District 1 Fisheries Supervisor  
Kevin Hopkins, District Fisheries Biologist**

**October 27, 2016**

Approved: \_\_\_\_\_  
Ben Batten  
Assistant Chief/Management

**SWEPCO LAKE FISHERIES INVESTIGATIONS**  
**2015 ANNUAL REPORT**  
**Executive Summary**

SWEPCO Lake is a 215-hectare lake in Benton County. This reservoir is an impoundment of Little Flint Creek located outside of Gentry. It is operated by the Southwestern Power Administration for electric power generation. It is unique among Arkansas lakes; surface temperatures remain high all year due to heated effluent from a coal burning power plant. Surface temperature generally ranges from 43 C (109 F) during the summer to about 18 C (65 F) during winter. During the two-week period that the plant is shut down during midwinter, temps as low as 6 C (43 F) have been noted. Initial stocking and operation of the power plant was in 1978. Spillway elevation is 347.6 meters (1140 ft.) msl. It has an average depth of 9.8-m (32-ft.) and a maximum depth of 27.5-m (90-ft.). The lake has largemouth bass creel of 10, which only one may exceed eighteen inches. The lake receives quite a bit of fishing pressure during the winter months due to its heated effluent and is also popular among tournament anglers.

SWEPCO Lake was evaluated by standard springtime electrofishing in 2016: a nighttime electrofishing sample on January 14th.

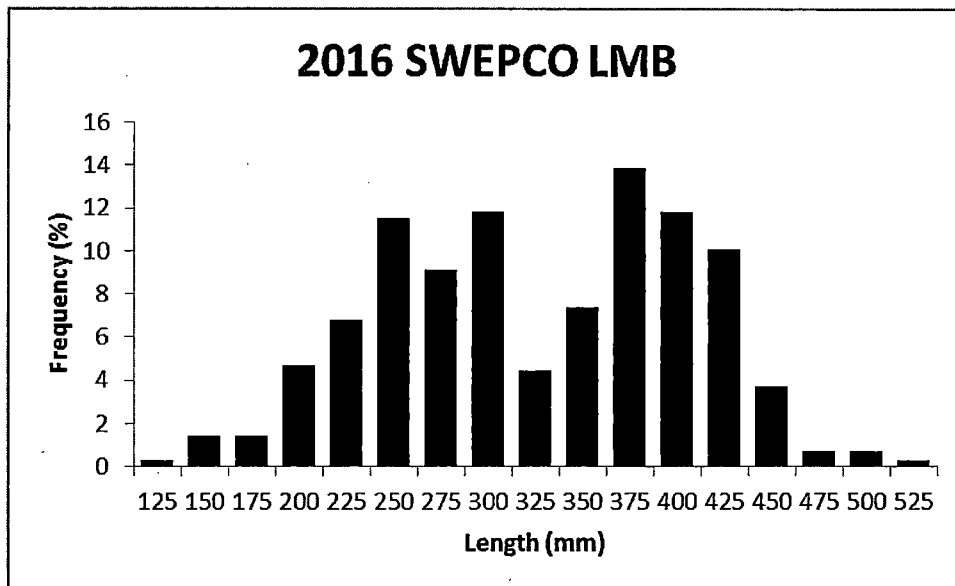
Largemouth bass abundance was great with a catch rate of 191 stock sized bass per hour of electrofishing. This catch rate is an increase from 2015 when it was 139. Weather is an extremely important factor in sampling this lake and a couple of weeks can make a difference. In 2016 our PSD was 67 and the PSD-P was 40. Comparatively, the PSD was 64 and PSD-P was 8 in 2015. It appears that the lake has a large population of fish in the two to four pound range and fishing in the next couple of years should be phenomenal.

Recommendations include sampling the largemouth bass population every year. We will periodically look at water temperatures and water clarity to get a better sample of the bass population. The best largemouth bass samples occur when water temperatures range from 12.7-18.3 Celsius (55-65 F) and secchi readings are 1-3 meters.

Table 1. Largemouth Bass Population Structure (2013-16)

Year	Catch per Hour (> stock)	PSD	PSD-P
2013	197	47	19
2014			
2015	139	64	8
2016	191	67	40

Figure 1. SWEPCO Lake Largemouth Bass Length Frequency



### RECOMMENDATIONS

1. Continue to sample every year to monitor the bass population.

CC: Captain Brian McKinzie  
Lieutenant Bill Ruby  
Wildlife Officer Cal Gunter



American Electric Power  
P.O. Box 660164  
Dallas, TX 75266-0164

RBS/BWM

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**RETURN RECEIPT REQUIRED**

Randy B. Solomon / Bruce W. Moore, P.E.  
DALRT - ENV

American Electric Power  
P.O. Box 660164  
Dallas, TX 75266-0164



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