

# LMB Data from Virginia Potomac River Tributaries: 2004-2016



[John.odenkirk@dgif.virginia.gov](mailto:John.odenkirk@dgif.virginia.gov)





# Tidal Potomac Largemouth Bass Sampling Locations



# VA Potomac Tributary Sampling

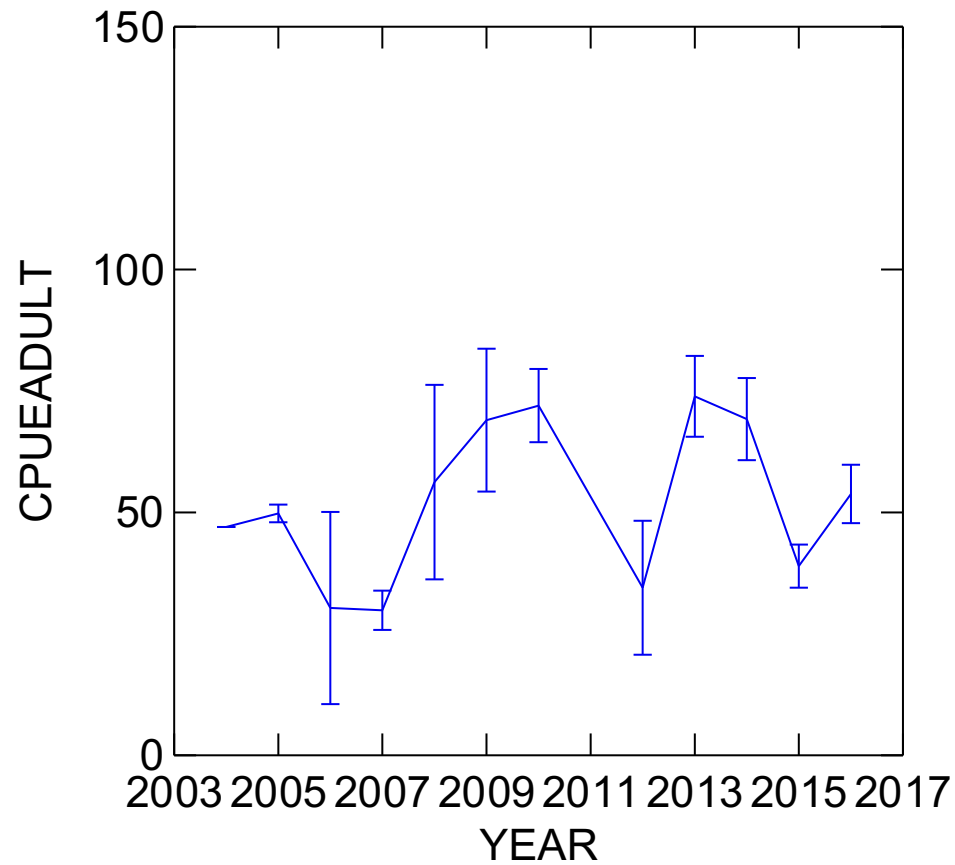
- Electrofishing surveys conducted in April & May.
- Attempt to sample each creek twice during period – 3 runs of 1200 sec. each visit.
- Largemouth Bass, Northern Snakehead and Yellow Perch collected.

# 2015 Fish Kill

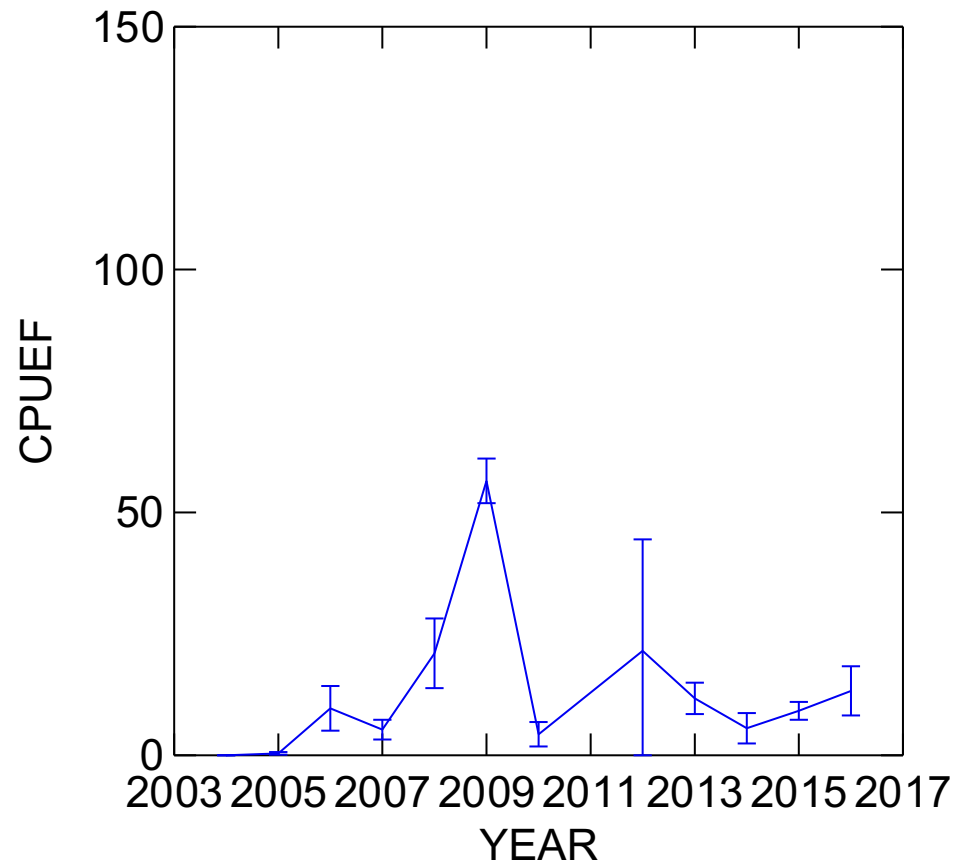
- Occurred in VA tidal creeks in Fairfax and Pr. Wm. Co.
- Cause unknown – DEQ suggested “toxic algae”
- Possibly similar to “SMB river kills” early spring previous years
- Early March (may have begun in Feb)
- All species and sizes (including snakeheads)
- Numerous large bass observed

Not Repeated in 2016

# Electrofishing Catch per Hour of Adult LMB



# Electrofishing Catch per Hour of Fingerling LMB



# LMB Electrofishing Summary

- 2016 spring CPUE of adult LMB was 54 fish/hr (mean of 26 samples from 5 creeks). This was average for 12-year period and up from 39 fish/hr (2015).
- CPUE of fingerling LMB was 13 fish/hr. This was slightly below average but improved from 2015 (9/hr).



# Catch Curve Analysis

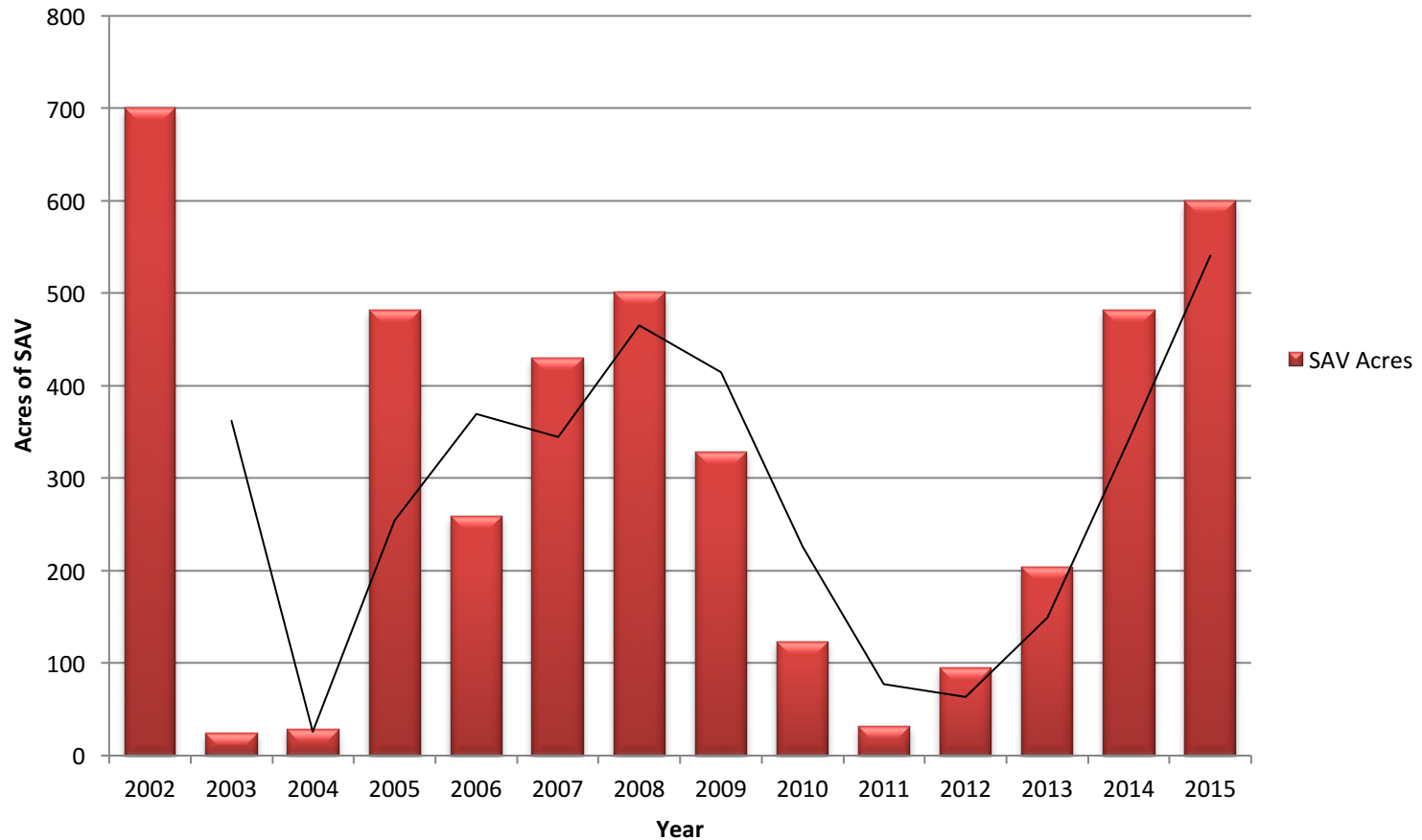
| Year class  | CC Residual | Result  |
|-------------|-------------|---------|
| <u>2015</u> | 0.3         | Good    |
| 2014        | 0.1         | Average |
| 2013        | -0.6        | Bad     |
| 2012        | -0.3        | Bad     |
| 2011        | 0           | Average |
| <u>2010</u> | 0.5         | Good    |
| 2009        | -0.3        | Bad     |
| <u>2008</u> | 0.7         | Best    |
| <u>2007</u> | 0.6         | Good    |

Based on age-structure of a subsample of first 50 bass collected in each of 4 creeks

# LMB Mortality Estimate

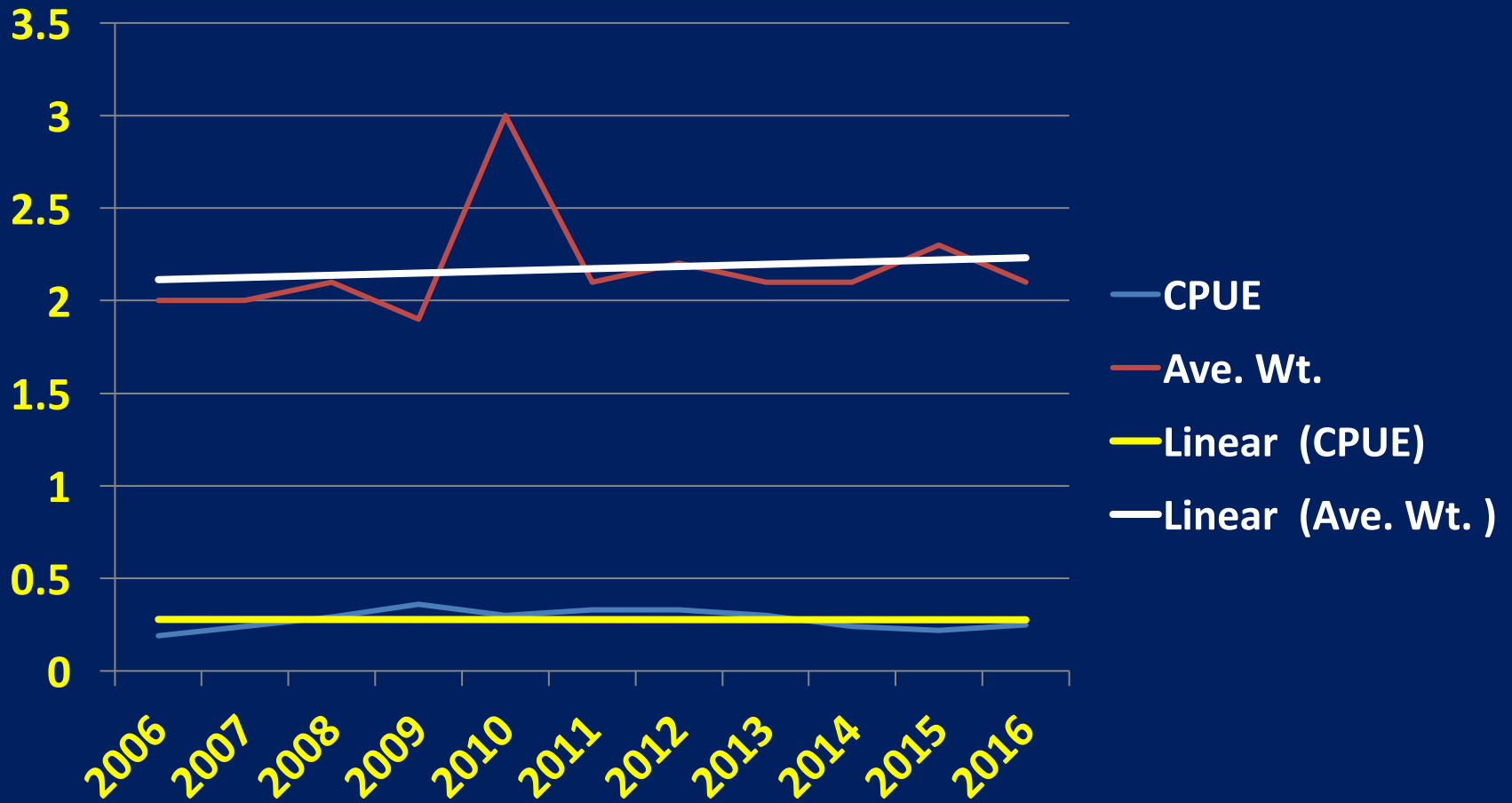
- From catch curve (inherent biases)
- Pooled creeks TAM=26%
- Average TAM of individual creeks=16%
- Very low – this includes both natural and fishing mortality (harvest + C&R delayed)
- Compares well to Lake Anna (27%), and lower than tidal Rappahannock (33%)

## Changes in SAV Abundance



**Compliments of DC Fisheries**

# New Horizons Tournament Data



Data represent 217 tournaments over 11 years with an average of 19 per season



# DGIF EF LMB Adults



**“Our results confirm those of previous modeling studies, which demonstrated that the total effect of release mortality from either nontournament or tournament anglers is small relative to other mortality sources.”**

**Kerns et al. 2016 TAFS**