US ERA ARCHIVE DOCUMENT



Harmful Algae Bloom 2012 Overview October 18, 2012

## Algae Sampling Began Early

The first HAB observation report was submitted May 14, 2012

46 requests to sample were submitted through September 30, with 40 lakes actually sampled

24 lakes were under an advisory or warning

17 counties contained lakes with advisories or warnings



#### The WHO Framework

- Two-Tier system based on microcystin OR bluegreen cell counts established through Secretary's Guidance Document:
- Advisory
  - >20,000 BG Cells/mL
  - 4 ug/L microcystins
- Warning
  - >100,000 BG Cells/mL
  - 20 /L microcystins



## Summary of this Summer's Blooms



## **Infrared Photo**



#### **Illnesses and Deaths**

- 2011 5 dog deaths confirmed, 2 illnesses
- 2011 7 confirmed, 5 probable, 1 suspect human illnesses (rashes and gastro-intestinal)
- 2012 ZERO dog deaths or illnesses reported
- 2012 Two confirmed human illnesses
- 2012 22 confirmed cattle deaths (stock ponds) with another 20+ unconfirmed



#### Successes in 2012

- Lake Meade Experience Diana Lehmann
- Successful Partnership
- HAB Web Page: On-Line Reporting for observations, human illnesses and animal illnesses & information
- Database Management System for tracking
- Effective Communication Strategies



#### Floating wetlands and gardens

Uptake of nutrients to reduce Harmful Algal Blooms.



Our Mission: To protect and improve the health and environment of all Kansans.

## Partnerships are Critical

- KS Wildlife, Parks and Tourism
- Army Corps of Engineers
- KDHE BOW, BEFS, BEH
- USGS
- KS Water Office
- Local lake managers and officials
- Kansas State University Vet School



## **Partnerships**

- Weekly conference calls conducted regarding recent sampling results and future sampling locations
- Answered questions from partners or local lake managers
- KDHE Advisories or Warnings
- Observations/Samples collected by KWPT or ACOE when requested



## **Public On Line Reporting System**

- KDHE website featured HAB web page information, current status and
- On-line reporting for observations
- On-line reporting for human illnesses
- On-line reporting for animal illnesses
- http://www.kdheks.gov/algaeillness/index.htm



# Internal Database Management System

Validation of observational reports

Task Management for sampling activities

Maps of Kansas lakes for sampling locations

Calculates status/changes status notification on website; tracks analytical data

Reporting tools including current and historical information

Contact information for lake managers and interested stakeholders

Time-saving and efficient!



#### Communications

- Weekly news release through KDHE Public Information Office coordinated with KWP&T and ACOE
- Kansas Health Alert Network Distribution
- Web page (list of Advisories and Warnings plus mapping)
- Toll free HAB Hotline
- Facebook featuring Odin



#### **Facebook Success**

- Introduction of "Odin" increased Facebook by 1,300% in one week
- Messages picked up by Veterinarian Clinician's Journal
- Lakeline Magazine



















## Kansas Dept of Health and Environment

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- KDHE Public Info Office
- http://www.kdheks.gov/algaeillness/index.htm





www.kdheks.gov

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