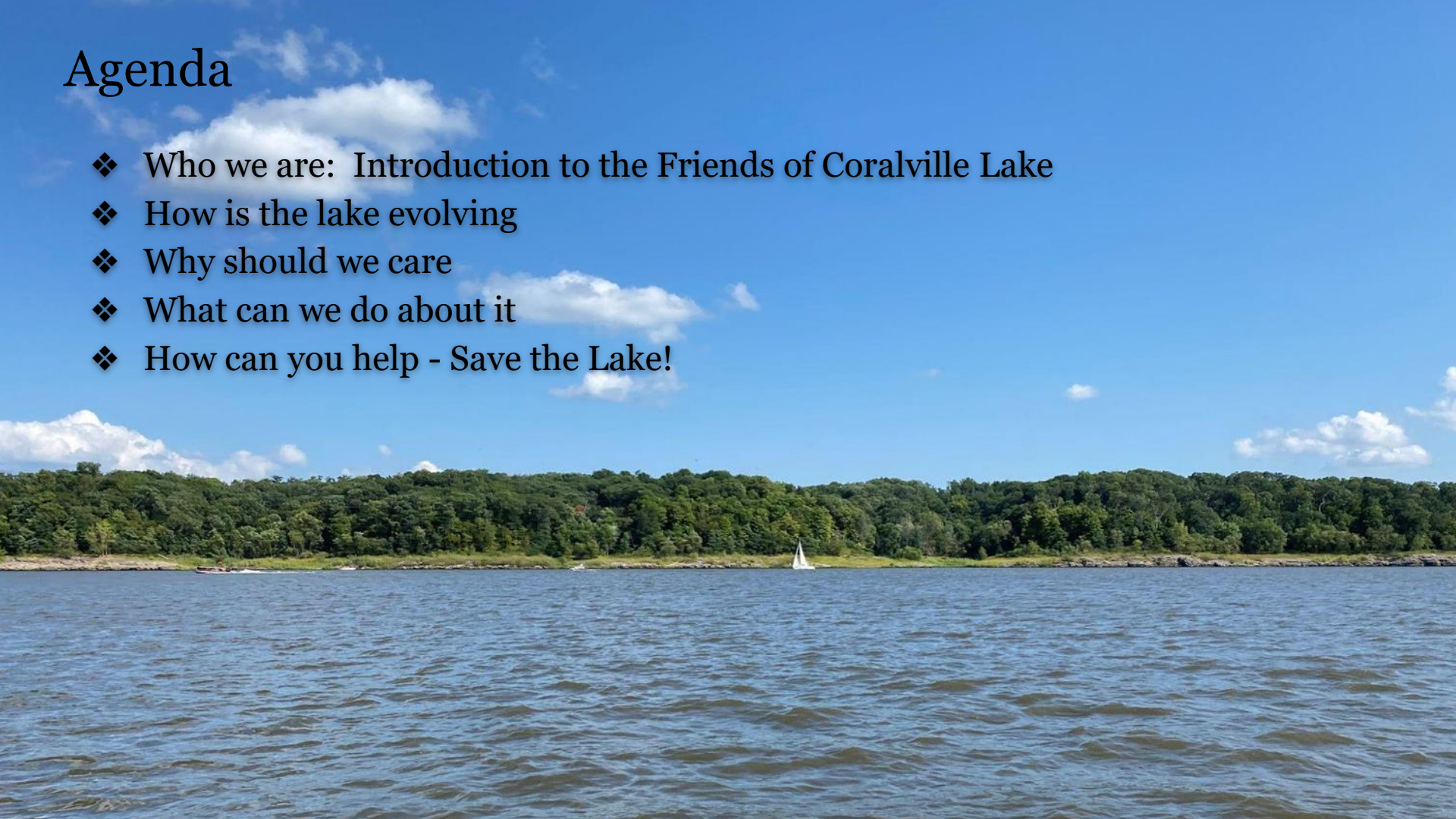




Friends of Coralville Lake

# Agenda

- ❖ Who we are: Introduction to the Friends of Coralville Lake
- ❖ How is the lake evolving
- ❖ Why should we care
- ❖ What can we do about it
- ❖ How can you help - Save the Lake!



# Friends of Coralville Lake



Founded: 2016

501c3 Non Profit Company as a Partner with Army Corps of Engineers

Seven Member Volunteer Board and One Part Time Paid Employee

FoCL started at the request of the Corps

# Friends of Coralville Lake - Team



**JON KOUNKEL: President**

**DERRICK PARKER: Treasurer, Founder of FoCL**

**MICHAEL MCCURRY: Secretary**

**COREY PHILLIPS: Director of Events**

**ANDY HAMER: Director of Communications**

**BRUCE MULFORD: Director**

**MATT MCDOWELL: Director**

**KEN LEO: Member at Large**

**CARL GONDER: Lake Improvement Manager**

# Our Mission

To enhance Coralville Lake and the surrounding land by bringing together organizations, businesses and individuals.



# FoCL Activities

VETERANS TRAIL RESTORATION

MID RIVER AREA CLEANUP

FISHING PIER AT TAILWATER

CERTIFIED FIRE FIGHTING CREW

HAUNTED HALLOWEEN TRAILS

SCOUT PROJECTS

HORSE TRAILS

FIREWOOD FOR THE CAMPGROUNDS

CAN AND BOTTLE COLLECTION AT THE CAMPGROUND

LAKE STUDIES BY STUDENT GROUPS



# What Is Happening?

The Lake Is Disappearing.

1958 Volume: 492,000 Acre Feet

2000 Volume: 421,000 Acre Feet

Average of 1,300 Acre Feet Per Year!





# CORALVILLE LAKE



**Began Operations in 1958.**

## **Authorized Purposes Defined by Law:**

- Flood Risk Management (Primary) – PL 75-761
  - Iowa and Mississippi Rivers
- Low Flow Augmentation – PL 75-761
- Fish/Wildlife – PL 85-624
- Recreation – PL 75-761

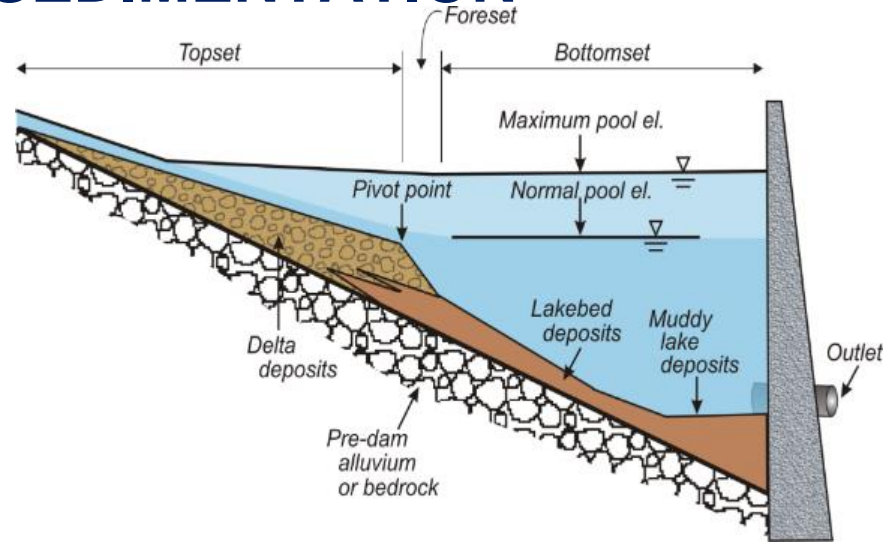


Reservoir storage is allocated for flood risk management (94% based upon 2019 survey) and low flow augmentation (6%).

Access and Facilities are provided for recreation, but water is not controlled for that purpose.



# RESERVOIR SEDIMENTATION

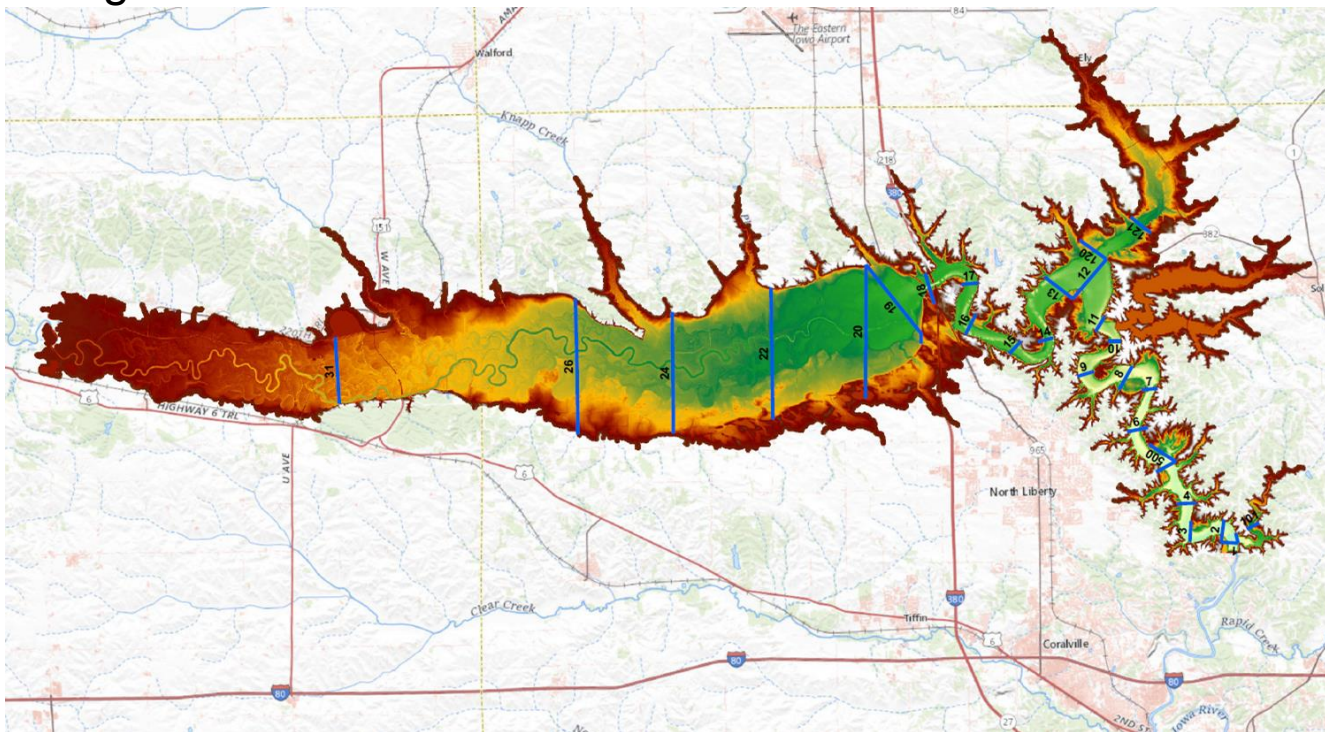


- USACE projects were formulated assuming a sediment design life (typically 50 or 100 years)
- Estimates of the reservoir sedimentation volume over the sediment design life were used to establish storage allocations.
  - What happens after sediment design life was not addressed in original planning.

USACE has responded to sedimentation at Coralville Lake through a raise in the conservation pool elevation from 680 to 683 feet in 1993 (earlier spring flood pool elevation was 670/675).

# SEDIMENT RESURVEY

- Updated sedimentation survey completed in 2019 – combines traditional bathymetric survey and aerial LiDAR to evaluate remaining conservation and flood storage.





# SEDIMENT RESURVEY



## Comparison of Current versus Original Storage

		Volume (acre-ft)	Area (acres)
1958	Elevation 683 feet	65,700	5,940
	Between Elevations 683 and 712 feet	492,000	24,800
2019	Elevation 683 feet	24,800	4,100
	Between Elevations 683 and 712 feet	412,300	25,000

## Reduction in Storage Volume

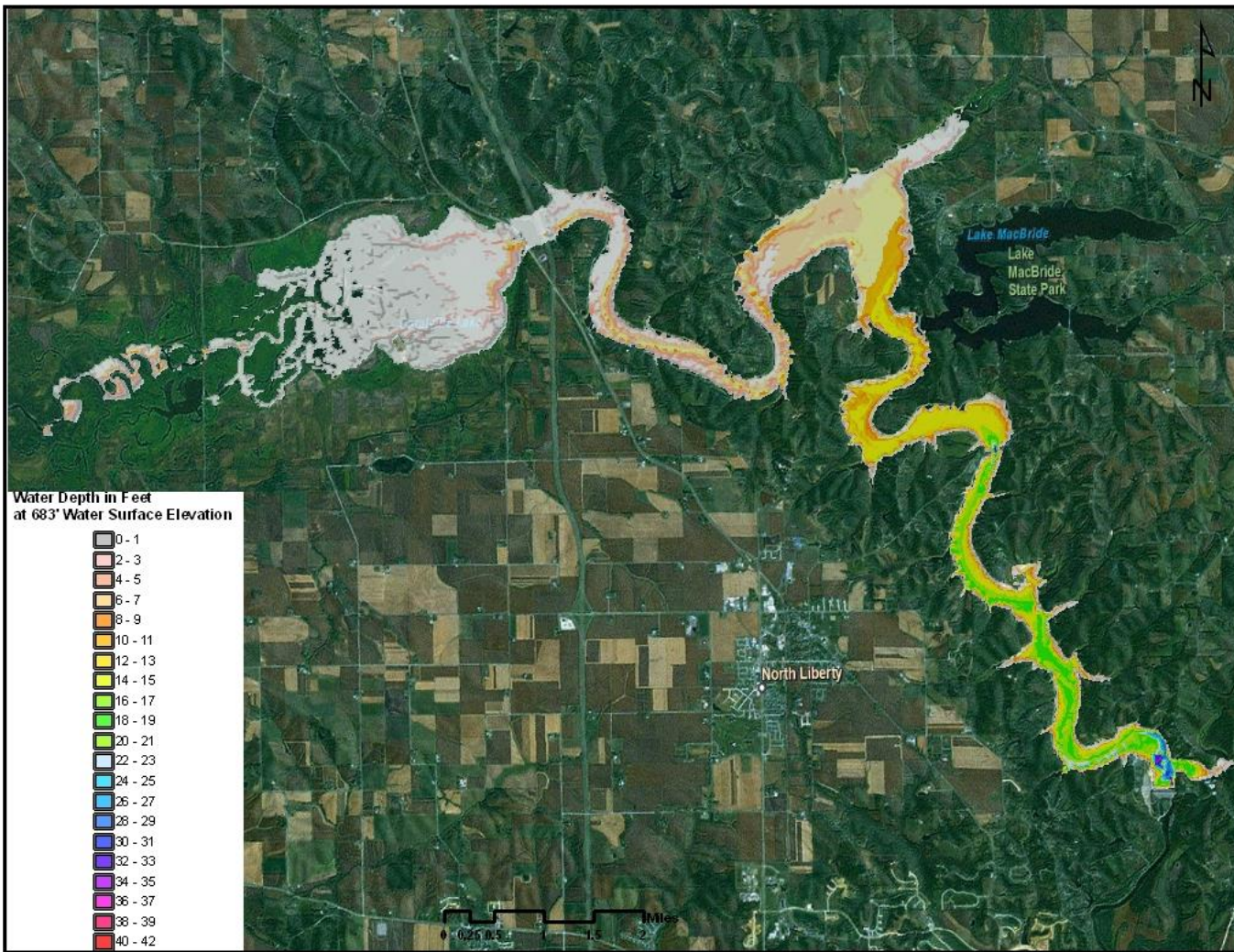
Below Elevation 683 feet	62%
Between Elevations 683 and 712 feet	9%

- For the period 1959 – 2019, the average rate of sedimentation was approximately 1,300 acre-feet per year.
- Over time, the rate of sedimentation in the conservation pool has decreased, while the rate of sedimentation in the flood pool has increased. The overall rate of sedimentation has remained fairly consistent between surveys.
- The estimated sediment trap efficiency for Coralville Lake is 72%.



# WHERE ARE WE GOING IN THE NEXT 10 TO 20 YEARS?

- Barring future management actions, we can expect:
  - Historic sedimentation rates to continue
  - Continued downstream migration of delta – further impacting access to middle and upper portion of lake
  - Continued loss of reliability in ability to meet drought demand
  - Slow degradation of flood risk management benefits
- Opportunities:
  - Section 1122 of the 2016 WRDA – beneficial use
  - Sustainable Reservoir Management Initiatives within USACE and BoR
- **Proposed Changes to the Water Control Plan**
  - **Variable spring drawdown**
  - **Increased allowable fall pool raise**



Coralville Lake Depths  
Below Elevation 683  
feet.



# WATER QUALITY

- USACE monitors water quality above, within, and below Coralville Lake (as well as the other District reservoirs) to monitor project impacts as well as to safeguard the public. In addition, we provide fish tissue samples to the DNR that they use to publish safe consumption guidelines.
- Primary issues at Coralville Lake have been turbidity and E. coli
  - Periodically results in closure of project beaches.
- Over time we have observed reductions in lead in samples.
- Emerging focus on monitoring for Harmful Algal Blooms (HAB).

# Why should we care?

\$76+ Million To Local Economy

590 Local Jobs Directly Tied

Average Travel Distance - 39 miles

Most Visited Lake in Eastern Iowa

400,000+ Household trips per year

# What are we doing about it?

## FoCL Developing a Multi-Year Action Plan

### Phase 1

**Raise awareness**

**Align key organizations  
focused on watershed  
management plan**

**Feasibility Study**

- **Local  
Feedback/Input**

**Begin Fundraising**

### Phase 2

**Primary Fundraising  
Campaign**

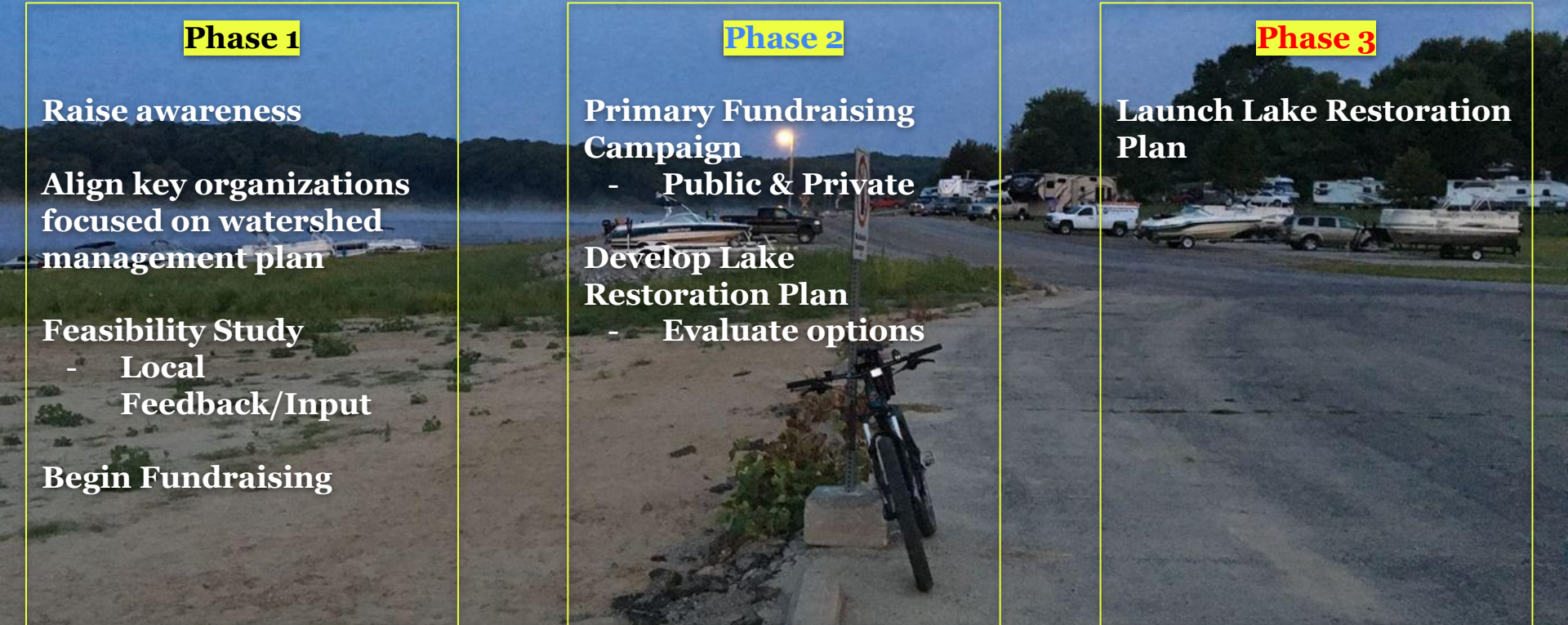
- **Public & Private**

**Develop Lake  
Restoration Plan**

- **Evaluate options**

### Phase 3

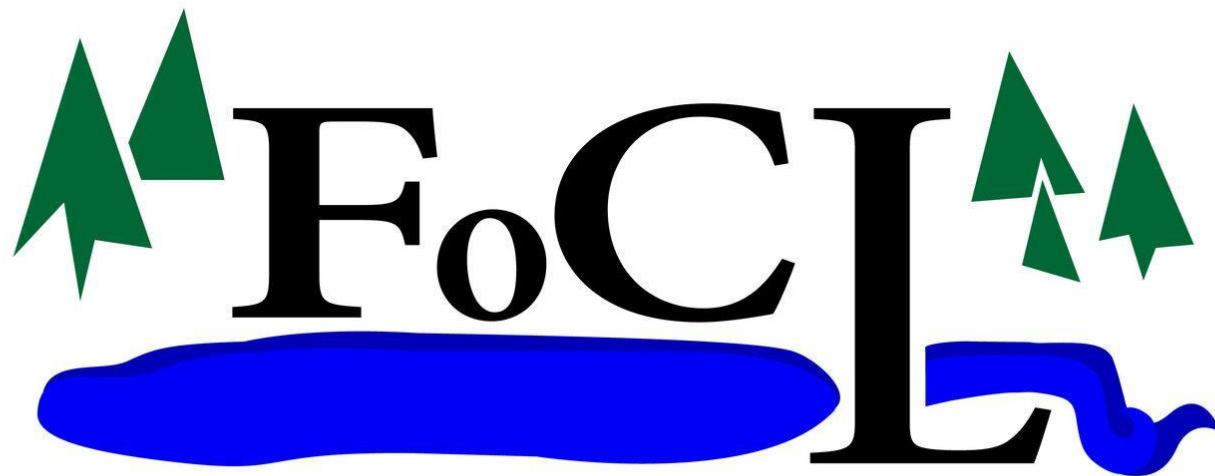
**Launch Lake Restoration  
Plan**





Together we can Save the Lake!





Friends of Coralville Lake