Deep Creek Lake Sediment Summary

Alternatives Analysis Results

DNR Sediment Management Plan (Phase I and Phase II)

- Goals of Plan
  - **Identify the accumulated sediment**
  - **Understand the environmental relationships**
  - **Analyze the alternatives (Alternatives Analysis)**
  - **Develop options to reduce sediment input**

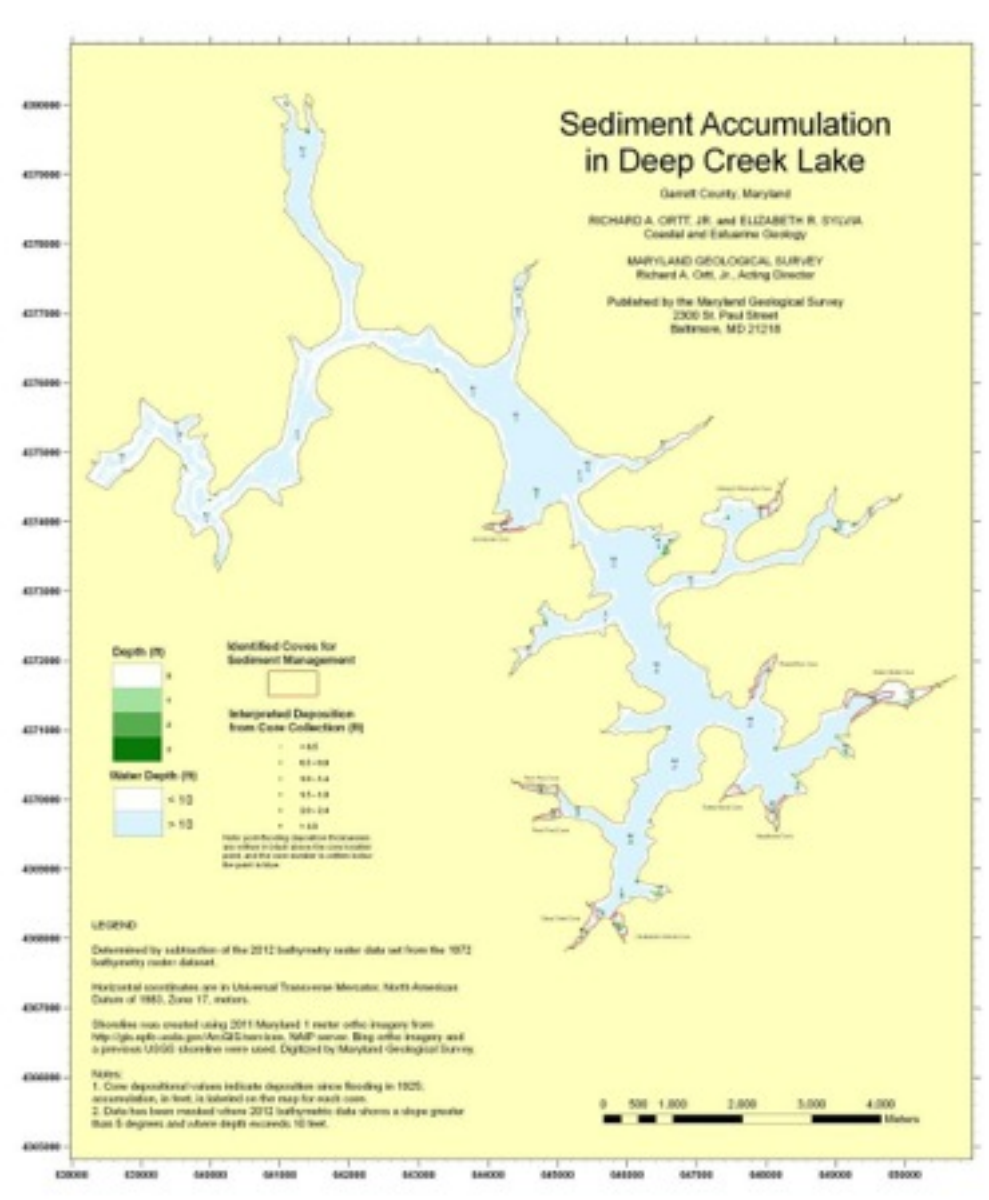
- Vetted Plan throughout Leadership Team
- Funded by Garrett County, POA and DNR

Deep Creek Lake Sediment

Sediment Accumulation

- Bathymetric Comparisons, Seismic, Sidescan sonar, and 42 Cores were collected throughout the Lake
- **Accumulated Sediment thicknesses from Lake construction to 2012 varied from 0 feet to 2.7 ft with an average of less than 6 inches.**
- Historical USGS and University of MD radiodating confirms sediment rate and quantity conclusions.
- Typically accumulated sediment depths were greater in southern coves.

Deep Creek Lake Sediment



Ten Coves Identified as having sediment accumulations greater than 1 foot in areas shallower than 10 ft water depth at full pool level.

- Pawn Run (2.7 ft)
- Penn (2.3 ft)
- Green Glade (1.4 ft –2.0 at Depth)
- Chatterton Schoolhouse (1.8 ft)
- Deep Creek (1.6 ft)
- Harvey's Peninsula (1.3 ft)
- Arrowhead (1.0 ft)
- Poland Run (1.0 ft)
- Turkey Neck (1.0 ft)
- Hazelhurst (1.0 ft)

Alternatives Analysis

- Analysis of no dredging, mechanical dredging (wet and dry), and hydraulic dredging was performed.

- Criteria evaluated included:
  - recreational use benefits/cost
  - environmental costs/benefits
  - economic costs/benefits
  - community costs/benefits

Deep Creek Lake Sediment

DEEP CREEK LAKE SEDIMENT STUDY - DECISION MATRIX

Environmental Impacts - Fish, Benthic, SAV, and Invasive were examined specifically. There are many species contained in each of these.

Economy - Economic Impact to Tourism, Hotel Occupancy, Service Industry, Rental Property, Property Value, and Local Economy

Recreation - The ability for Recreational Boating, Fishing, Whitewater Rafting, and Swimming to continue

Construction Cost - The relative cost compared to the other construction costs within the study which includes cost of ROW and Permitting

Impacts	Weighing Factor	Impacts of Hydraulic Dredging		Impacts of Mechanical (Wet) Dredging		Impacts of Mechanical (Dry) Dredging		No Dredging
		March to Memorial Day	Labor Day to December	March to Memorial Day	Labor Day to December	March to Memorial Day	Labor Day to December	
Environmental Impacts	**20**							
Fish	5	1	1	3	2	2	1	5
Benthic	5	1	1	3	2	2	1	5
SAV	5	1	1	3	2	2	1	5
Invasive	5	1	1	3	2	2	1	5
Economy	**20**							
Economic Impact	10	5	5	5	5	4	4	1
Stimulate Local Economy	10	3	3	3	3	5	5	1
Recreational Impact	**20**							
Recreational Boating	5	4	4	2	2	1	1	5
Fishing	5	4	4	2	2	1	1	5
Whitewater Rafting	5	4	4	2	2	1	1	5
Swimming	5	4	4	2	2	1	1	5
Construction Cost	**20**							
Capital Costs	15	3	3	1	1	2	2	5
ROW	5	2	2	1	1	1	1	5
Permitting	0	1	1	3	2	2	1	5
TOTAL		**235**	**235**	**200**	**180**	**185**	**165**	**320**

High Score = Best Case Scenario, Scoring as follows: 1 = Worst Negative Impact, 2 = Negative Impact, 3 = Neutral, 4 = Minimal/Positive Impact, 5 = No/Best Impact

Results

- DNR supports the findings of our independent contractor to not perform any mitigation on accumulated sediment.

- DNR is committed to work with the citizen-led Watershed management team to continue monitoring, restore streams, and to reduce sediment and nutrients to the Lake through the Watershed Management Plan process.

- Deep Creek Lake is a spectacular resource and DNR is committed to preserving this legacy.