

An aerial photograph of a landscape, possibly a farm or rural area, overlaid with a complex network of lines. The lines are primarily green and red, forming a dense, interconnected pattern that follows the contours of the land and what appears to be a water body or drainage system. The green lines are more numerous and form a fine, grid-like or branching structure, while the red lines are thicker and form larger, more irregular shapes, possibly representing major erosion control features or property boundaries. The background is a dark, textured aerial view of the terrain.

# Introducing Erosia

A New Way of Water Quality Control

# How Does Sediment-Laden Discharges Affect You?

- Why?
- Current Issues?
- What are your solutions right now?
- Legal Issues?

# Why Did We Start Erosia?

## Physical solutions:

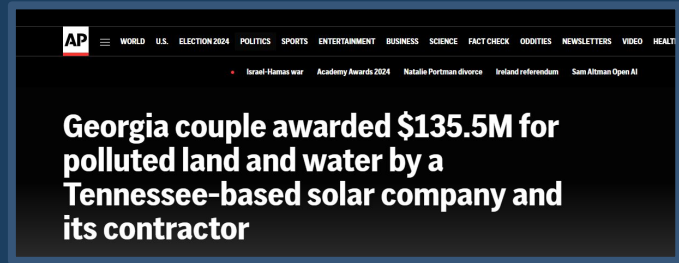
- BMP blanketing
- Replanting/terraforming the affected area

## Polluted water due to erosion:

- Dredging.

This can cost *10s to 100s of thousands dollars,*  
*and sometimes even millions*

Still, not as bad as a lawsuit...



# Well... What Are Your Options To Prevent?

## Land Surveying

- Limited accuracy
- Time consuming
- Labor intensive
- Expensive

## Current Digital Options

- No visualization
- Steep learning curve
- Hard to understand
- Non-Spatial

# Why use Erosia?

- **Minimize** the Land Use Surveys



Satellite Image

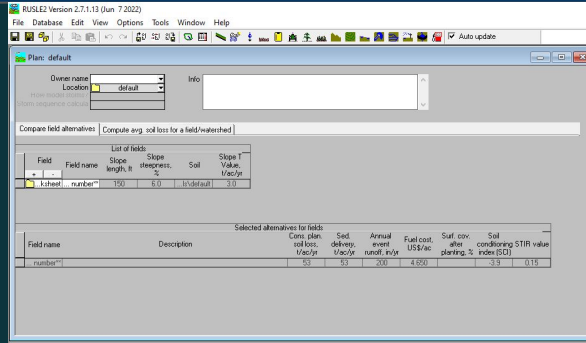


Land use types automatically detected

- **Automates** land use analyses using satellite technology
- See how well environment prevents discharge into waterways

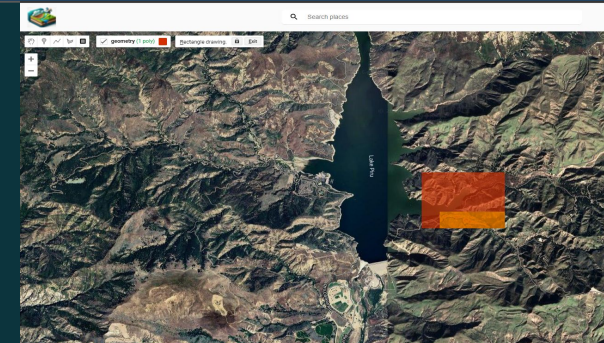
# Ease of Use (Workflow)

- No manual data collection needed
- Easy to use
- Visual representation entire study area



Interface for RUSLE2

- Complicated
- Hundreds of different parameters required
- Time consuming process



Interface for Erosia

- Easy to use
- Straight forward (!)
- Web app for easily accessing data

# Visual data = better awareness

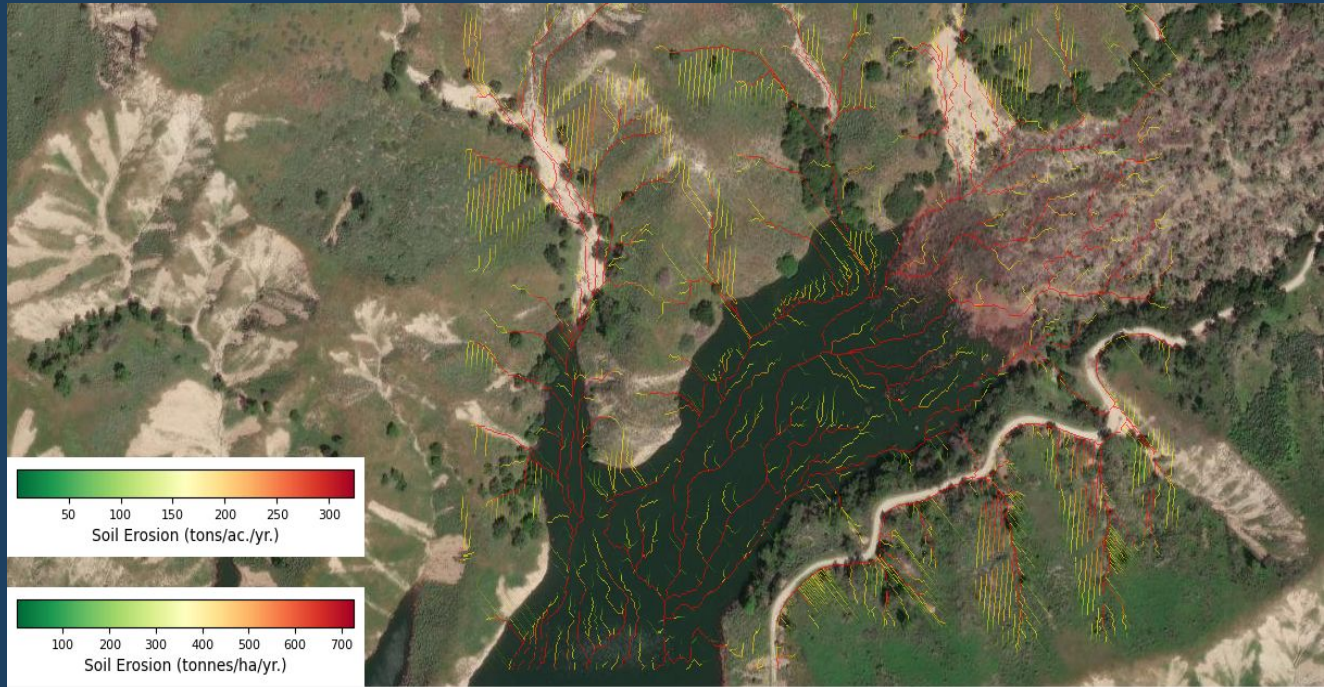
- Quickly identify whether river/stream is at risk for sedimentation
- Evaluate potential discharge risks **before** they happen
- View **the bigger picture** of how erosion is occurring throughout Entire study are
- Easily track sources of poor water quality



# Why use Erosia?

- Quickly view Erosion Hot Spots

- What areas  
Would return the  
Greatest ROI  
on BMP funding?



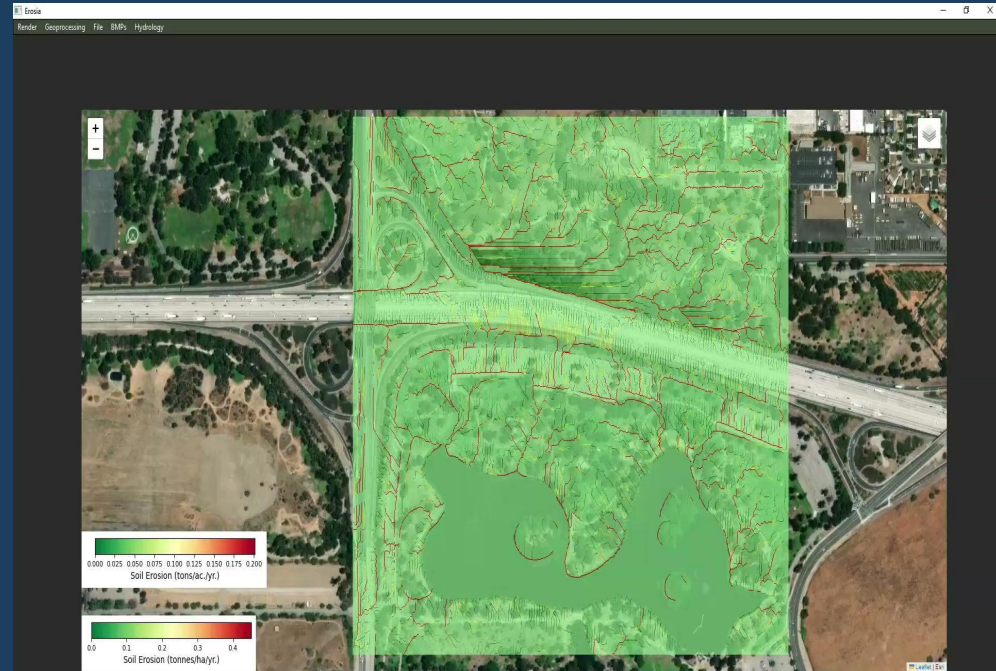


# Why use Erosia?

- **STOP** Wasting Money on incorrect BMP Usage
- View *Exactly* what BMP will minimize sediment-laden discharge the most

(Video link):

<https://www.youtube.com/watch?v=bt0DUKkU4gU>



# Why use Erosia?

- Reduced labor cost
- Speed up compliance processes
- Save money
- Quickly identify erosion hotspots

# Our vision



Replace current methodology



Replace Hydrologists



Universal way of communicating areas at high risk



Allow property owners & general public to easily view  
Erosion scenarios (avoid lawsuits!)



improve communication in MS4 enforcement

# Erosia use cases

- MS4
  - Identify areas of high erosion
  - Identify high priority projects for funding
- Grant funding
  - Identify which projects are in need of stabilization
- Watershed plan development
  - Identify which areas BMPs should be placed

# Methods tested and evaluated by...



Dr. Jerald S. Fifield  
(Hydrodynamics Inc.)

Book your free demo today!

