

A CONFLUENCE OF OFFENSE:

THE ECONOMIC IMPACT OF RESTORATION IN A TIME OF ANTI-STREAM RESTORATION SENTIMENT

LIAM O'MEARA

PRESIDENT

ENVIRONMENTAL QUALITY
RESOURCES, LLC

LOMEARA@EQRLLC.COM



**“EXPLANATIONS EXIST; THEY HAVE EXISTED
FOR ALL TIME; THERE IS ALWAYS A WELL-
KNOWN SOLUTION TO EVERY HUMAN
PROBLEM—NEAT, PLAUSIBLE, AND WRONG.”**

H.L. MENCKEN

WHO DO I THINK I AM?

- **Ecological Restoration Contractor:** Implementor of dozens of projects of all design approaches in all kinds of communities over 10 years.
- **Ecological Restoration Trade Group Founder:** Founder and President of Chesapeake Watershed Restoration Professionals (CWRP)
- **Land Trust Supporter** and Advocate for Land Conservation
- **Resident and Taxpayer** in a district with a very high number of stream restorations
- **Father** of three very inquisitive and nature-loving children.

WHAT AM I GOING TO TALK ABOUT?

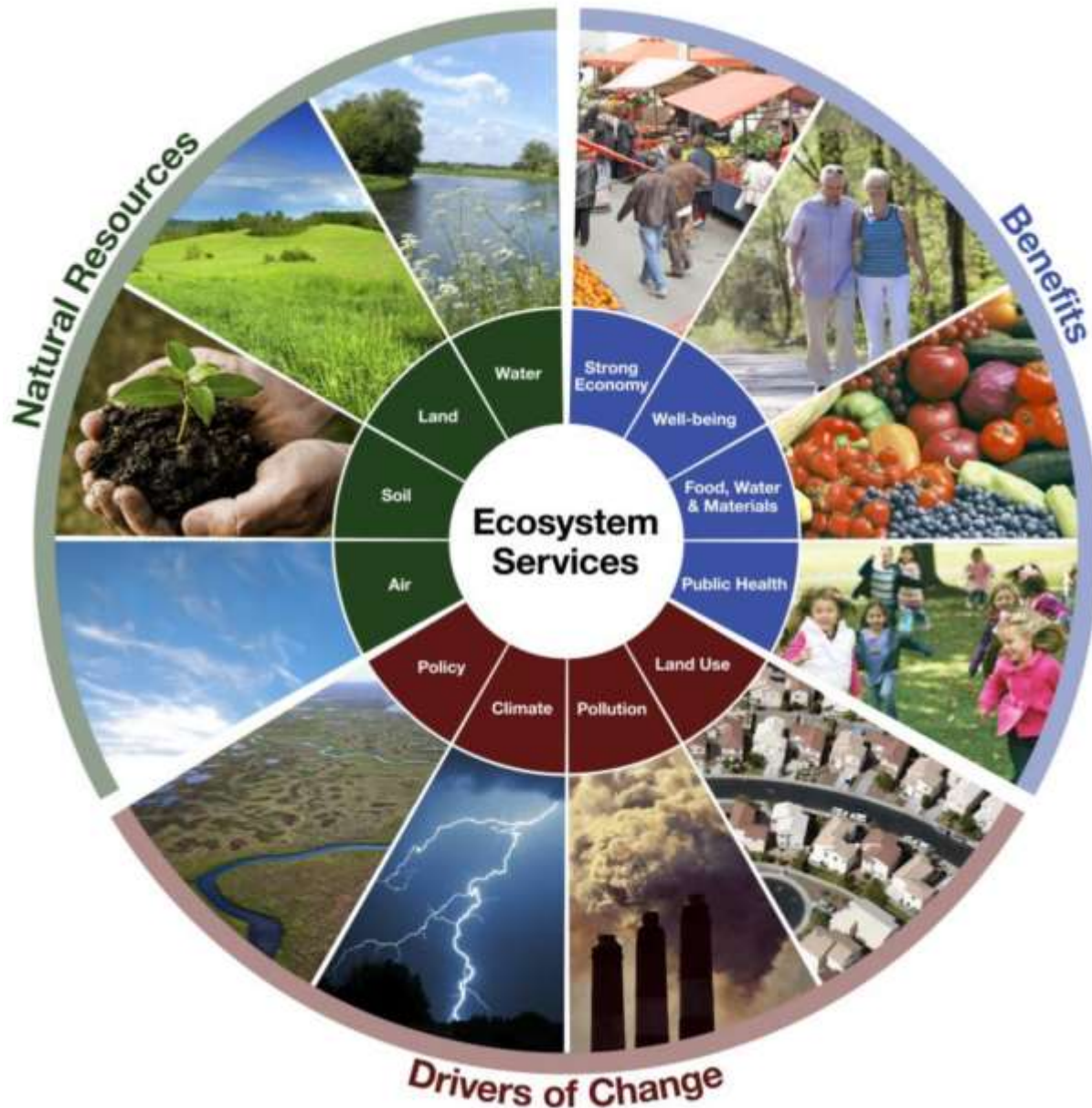
I'm just asking and trying to answer questions!

- What is the economic impact of stream restoration?
- What is the resistance to stream restoration as a practice? Where does the resistance come from?
- Do the economics matter?
- **Why should you care?**

ECONOMIC IMPACTS OF ECOLOGICAL RESTORATION:

Considerations:

- **Complexity:** Ecology is complex, economics are complex, and the economic impact of ecological restoration is *extremely* complex.
- **Benefits are very difficult to measure.**
- **Insufficient Data and Research:** The few studies done include:
 - BenDor, Lester, Livengood, Davis, Yonavjak, 2015 *Estimating the Size and Impact of the Ecological Restoration Economy*
 - Botta, Borsum, Camp, Court, Frederick, 2019 *Short-term economic impacts of ecological restoration in estuarine and coastal environments*
 - Thomas, Huber, Skrabis, Sidon 2016 *Estimating the Economic Impacts of Ecosystem Restoration– Methods and Case Studies*



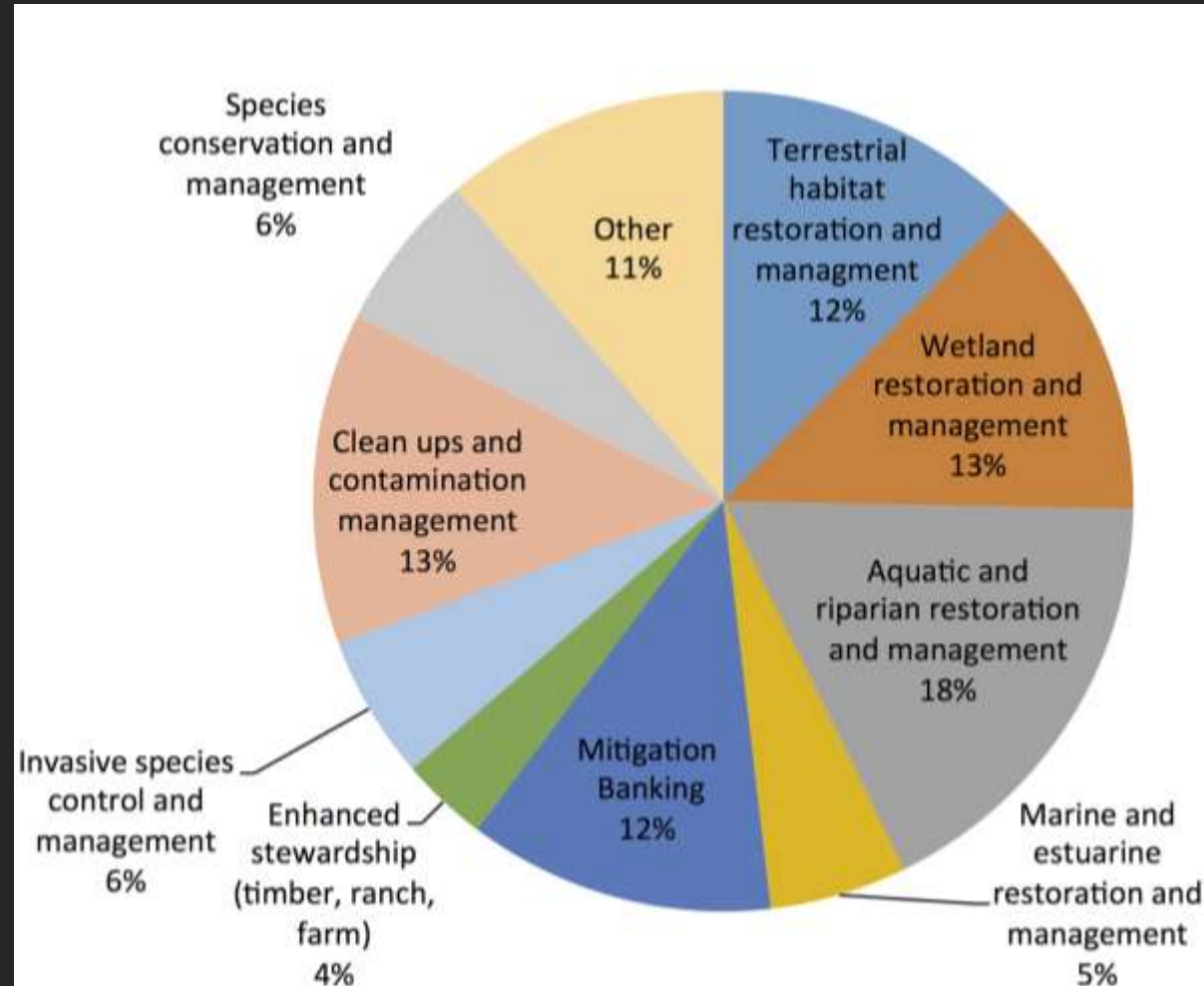
ECOSYSTEM SERVICES BENEFITS:

- Strong Economy
- Well-being
- Food, Water, Materials
- Public Health

Source: Environmental Protection Agency: Enviro Atlas,
www.epa.gov/enviroatlas/ecosystem-services-enviroatlas-1

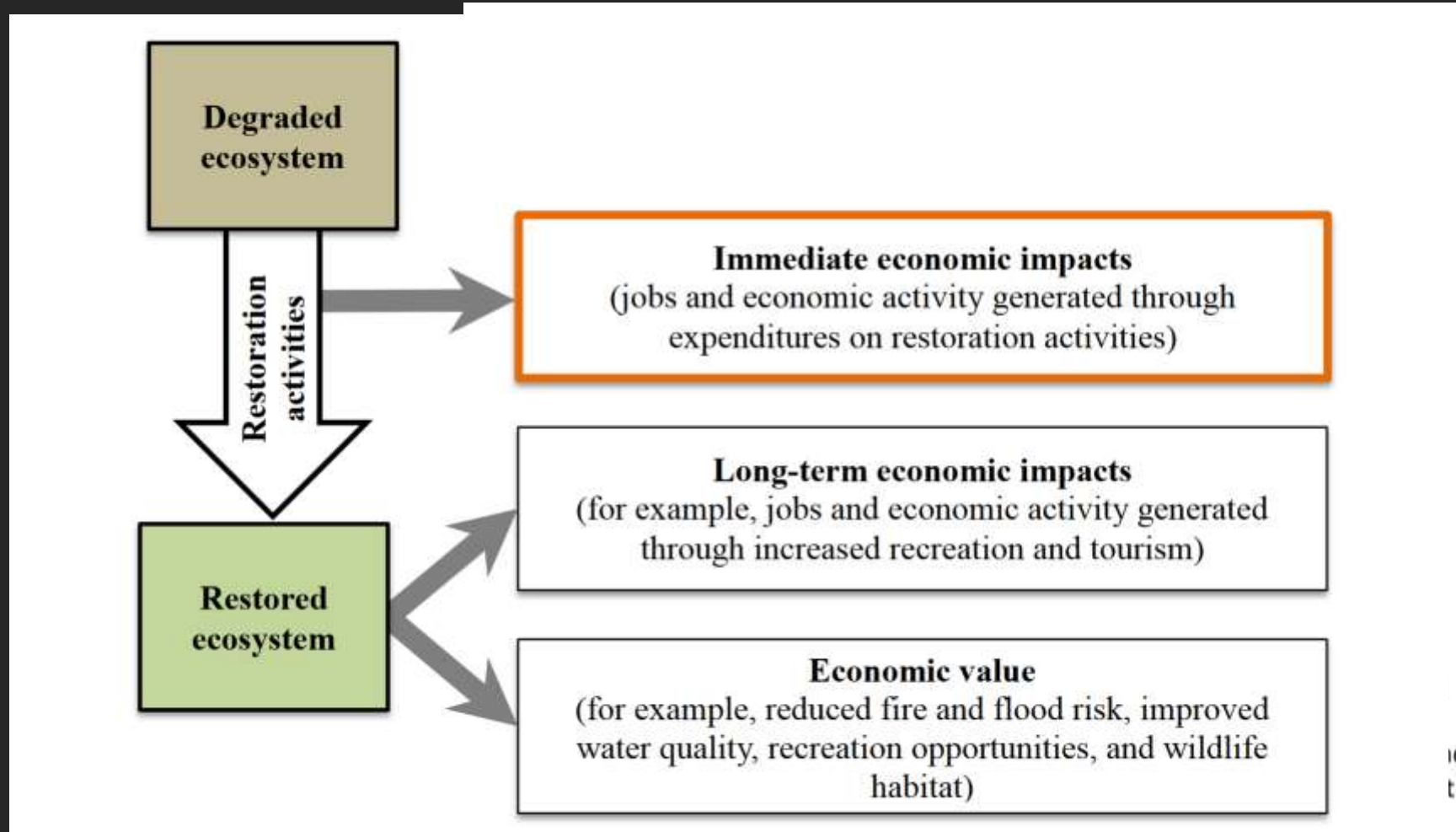
ECONOMY?

Ecological Restoration =



Source: BenDor, Lester, Livengood, Davis, Yonavjak, 2015 *Estimating the Size and Impact of the Ecological Restoration Economy*

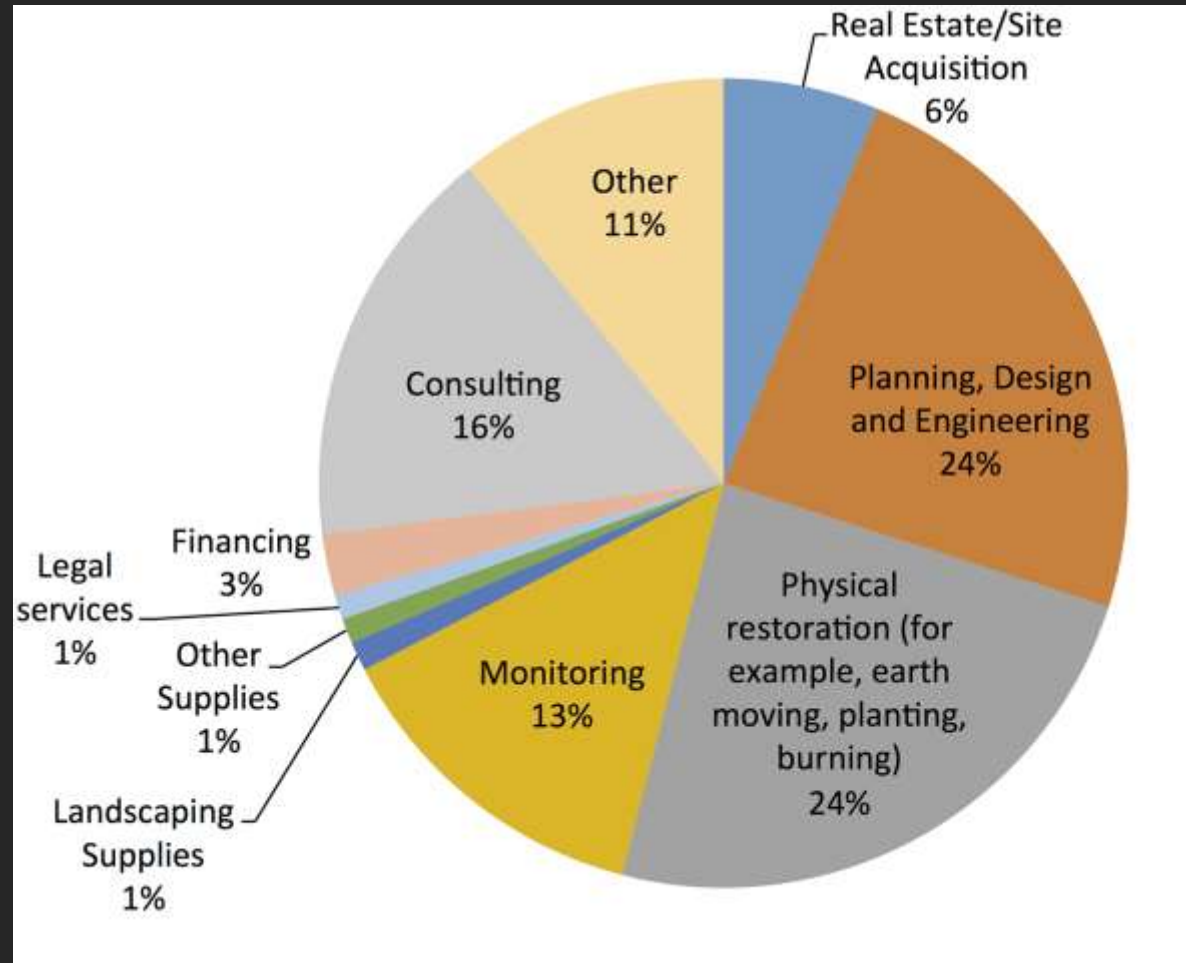
ECONOMIC IMPACTS OF ECOLOGICAL RESTORATION: DIRECT ECONOMIC IMPACTS



Source: Thomas, Huber, Skrabis, Sidon 2016 *Estimating the Economic Impacts of Ecosystem Restoration—Methods and Case Studies*

WHAT IS THE ECOLOGICAL RESTORATION ECONOMY?

**Ecological
Restoration
Economy =**



Source: BenDor, Lester, Livengood, Davis, Yonavjak, 2015 *Estimating the Size and Impact of the Ecological Restoration Economy*

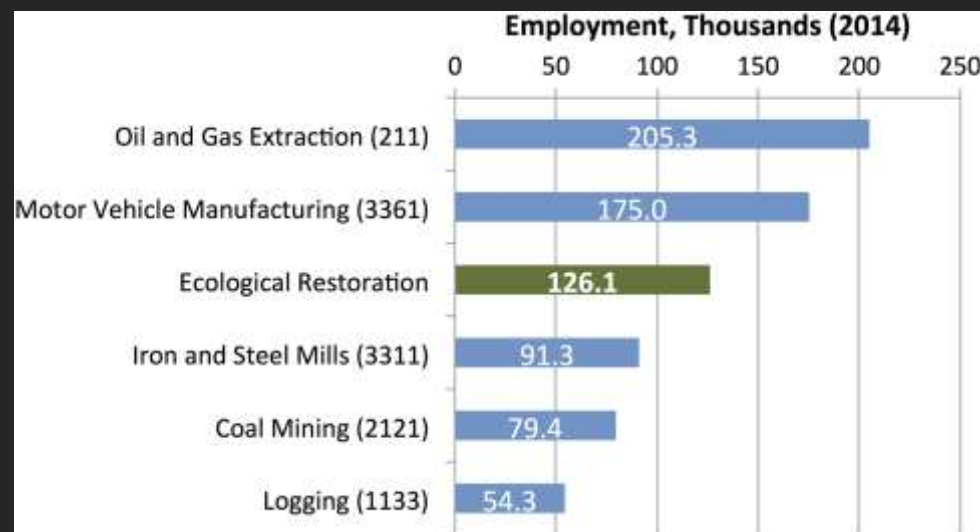
HOW BIG IS THE ECOLOGICAL RESTORATION ECONOMY?

ECOLOGICAL RESTORATION SALES (2014):

- \$9.5 BILLION DIRECT OUTPUT
- \$15 BILLION INDIRECT IMPACT
- 24.5 BILLION TOTAL IMPACT

ECOLOGICAL RESTORATION DIRECT EMPLOYMENT:

- 126K DIRECT EMPLOYMENT
- 95K INDIRECT EMPLOYMENT



Source: BenDor, Lester, Livengood, Davis, Yonavjak, 2015 *Estimating the Size and Impact of the Ecological Restoration Economy*

WHAT IS ANTI- STREAM RESTORATION SENTIMENT?

“Greenwashing”

“Like a nuclear bomb
dropped, total
annihilation”

“Crimes against nature”

“Bulldozers crawling
everywhere”

**“Homeowners will
lose their property
value”**

**“The view from your
backyard will be
ruined”**

“Stream restoration is
just too expensive”

“Companies are just trying to make money”

“Risk of flooding your
house”

“Ridiculous rain-tax
boondoggle”

WHO IS ANTI-STREAM RESTORATION?

- NIMBYs and NIMBY-adjacents
- Environmental Activists with Legitimate Environmental Concerns
- Environmental Activists with Unhinged Environmental Concerns
- Anti-regulation and Anti-environment Groups
- Anti-capitalists (where SR is associated with mitigation)

NIMBY INDUSTRIAL COMPLEX

- Huge overlap with anti-development activism of all stripes.
- “Great idea for somewhere else.”
- CAVEpeople. BANANAs.
- Concentrated in affluent, suburban communities.
- Property value and individual rights are paramount.
- **Not convinced by scientific evidence or arguments for “greater good” but economic arguments are powerful.**



ENVIRONMENTAL ACTIVISM:

SOME SPECIFIC LEGITIMATE CONCERNS:

- MATURE TREE LOSS
- LOSS OF PLANT DIVERSITY
- SOIL COMPACTION
- HABITAT IMPACTS

ECONOMIC ARGUMENTS ARE NOT EFFECTIVE, SCIENTIFIC ARGUMENTS MAY BE PERSUASIVE

CLEAR COST/BENEFIT AND CONTEXT ARE SO IMPORTANT



MODERN ENVIRONMENTAL ACTIVISM: EVERYONE IS AN EXPERT

SOME “UNHINGED” CONCERNS:

- INTENTIONAL DESTRUCTION OF STREAMS BY PRACTITIONERS
- ALL URBAN STREAMS WILL REPAIR THEMSELVES
- EROSION ISN'T A REAL PROBLEM
- UPLAND IMPROVEMENTS WILL SOLVE ALL PROBLEMS
- BENEFITS OF RESTORATION AREN'T REAL

THIS IS ATTENTION-SEEKING BEHAVIOR,
IT IS NOT WORTHWHILE TO ENGAGE-- NO
ARGUMENT WILL BE PERSUASIVE.



WHY SHOULD YOU CARE? BECAUSE SO MUCH PROGRESS IS AT STAKE

- **Right now anti-stream restoration groups are advocating for a total ban on stream restoration as a practice in Maryland and Virginia.**
- They are lobbying local and national politicians and are actively harassing EPA, USACE, and state-level administrators to deny permits to stream projects.
- Groups such as the Sierra Club, Chesapeake Bay Foundation, and numerous local groups have given a platform to misinformation.
- Denying Stream Restoration permitting or undervaluing the benefits or restoration will do significant damage the effort to restore ecological function to our watersheds.

WHY SHOULD YOU CARE? ECONOMIC IMPACTS

- The Ecological Restoration Economy Employs 221,000 people.
 - More than coal mining.
 - More than logging.
 - More than all the steel mills in the country.
- The Ecological Restoration Economy is a \$21.5 Billion Industry (conservative estimate)
- All is at risk of being diminished by anti-stream restoration sentiment.
- Huge Spending Multiplier Effect
- Positive Externalities
- Strong Employment Effect

WHAT TO DO?:

ADDRESS LEGITIMATE CONCERNS, IGNORE THE REST.

- Get involved.
 - Participate in local discussions.
 - Attend and comment at public meetings.
 - Support both national and local Ecological and Stream Restoration Communities: SER, ERBA, RI, MSRA, CWRP
 - Write Opeds/letter to the editor, letters to politicians, phone calls to administrators. **It all matters.**
- Support and advocate for more and better science:
 - Innovation is essential and constant improvement should be a way of life.
 - Advocate and support strong monitoring and data collection programs.
 - **Demonstrate Success– strive for definitive demonstration of uplift.**



THANK YOU!

lomeara@eqrllc.com

