



WOTUS: Nexus of a Perfect Storm

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VIRGINIA TECH

SMALL NUMBER OF STUDIES

EPA HAS NOT INVESTED IN RESEARCH THAT IS DESIGNED TO SUPPORT POLICY ANALYSES

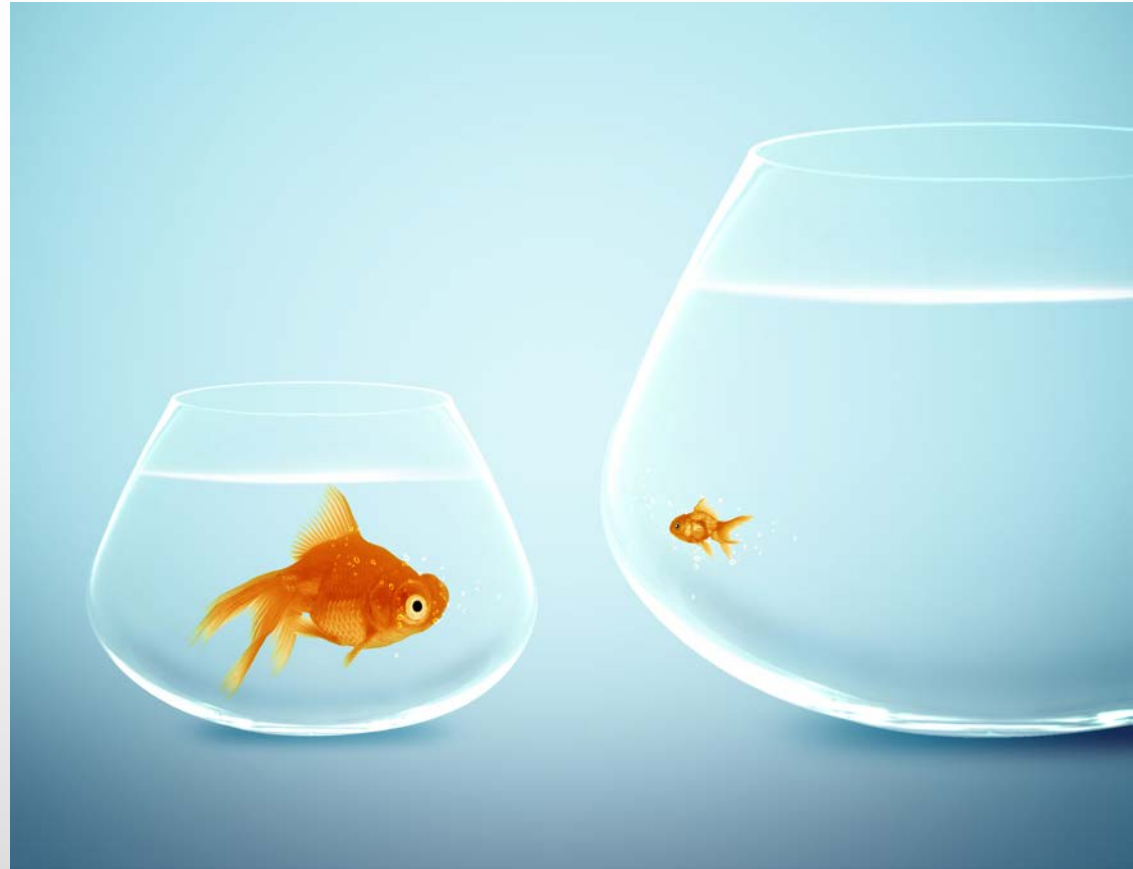


INCONGRUITY OF PUBLISHED STUDIES & U.S. EPA POLICY

REGIONAL STUDIES OF RELATIVELY LARGE
CHANGES IN WATER QUALITY

VS.

NATIONAL POLICY WITH SMALL MARGINAL
CHANGES IN WATER QUALITY



INCONSISTENCY WITH ECONOMIC THEORY

- PASSING THE ADDING-UP TEST
- STUDIES MAY NOT BE DESIGNED TO SATISFY ADDING UP
- ADDING UP MAY NOT HOLD FOR NONMARKET NOR MARKET ITEMS

Consumer Theory Made Much Too Simple

⌘ The basics of the Theory of Demand



6/10/2014

1998 Peter Berck

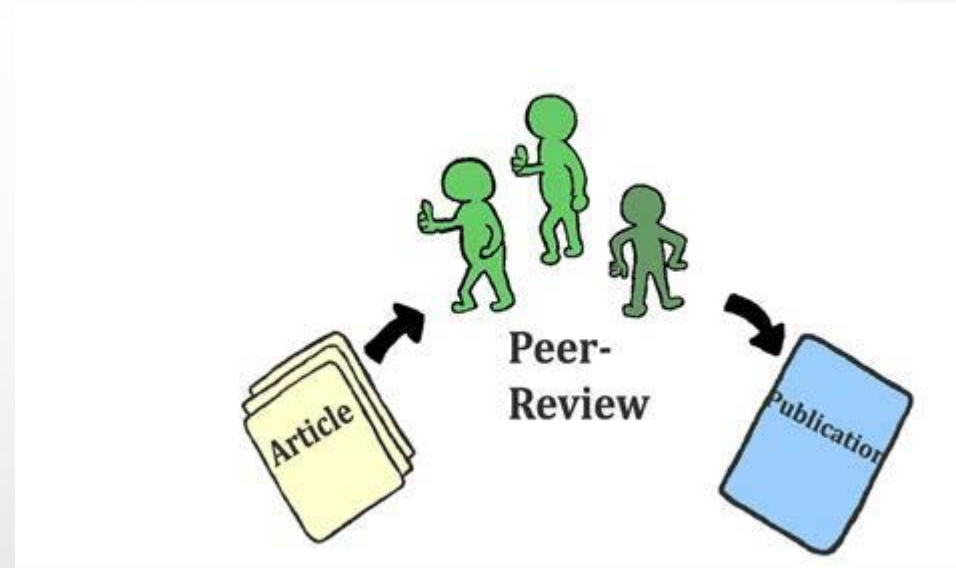
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PEER REVIEW IS A DOUBLE-EDGED SWORD

NEEDED FOR SCIENTIFIC CREDIBILITY

BUT ...

REWARDS THEORETICAL AND
METHODOLOGICAL INNOVATIONS



“GOOD ENOUGH FOR GOVERNMENT” IS AN UNNECESSARY PEJORATIVE

- CRITICS AND PROPONENTS DO NOT USE A CONSISTENT DEFINITION OF VALIDITY
- ONE FLAW DOES NOT BY ITSELF INVALIDATE A STUDY



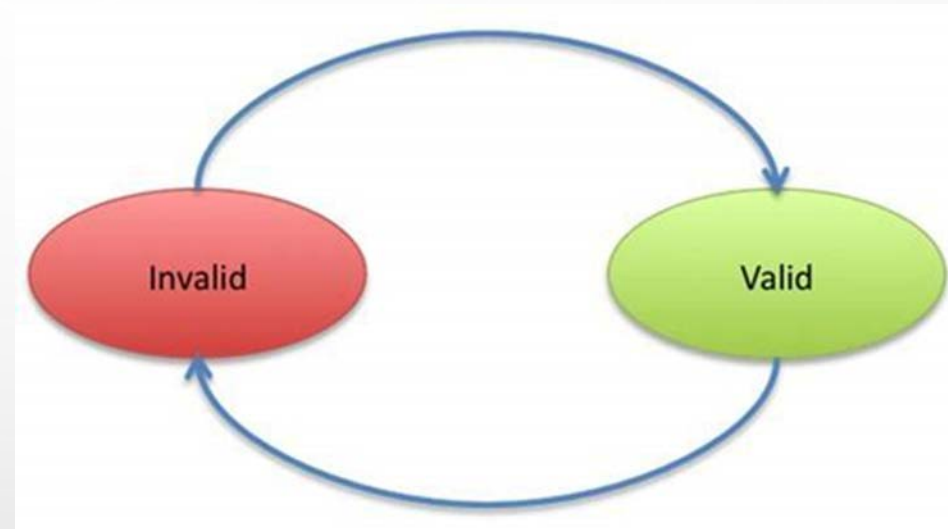
BENEFIT-TRANSFER METHODS ARE STILL EVOLVING

- VALIDITY INVESTIGATIONS APPLY CONVERGENT VALIDITY WHERE THE TRUTH IS NOT KNOWN
- BENEFIT-TRANSFER PROCEDURES CANNOT OVERCOME ALL LIMITATIONS OF THE EXTANT DATA



STUDY AGE SHOULD NOT BE A CRITERION FOR EXCLUSION

- NEW RESEARCH CONDITIONS ARE BASED ON INSIGHTS FROM PREVIOUS RESEARCH
- DATED STUDIES MAY STILL INFORM THE ANALYSIS
- WE DO NOT EXCLUDE REVEALED-PREFERENCE DATA BECAUSE IT IS OLD



DISCIPLINARY BICKERING

- THE CENTRAL POLICY ISSUE BECOMES LOST IN TRANSLATION
- CAUSES DECISION MAKERS TO *TURN A DEAF EAR*



SMALL VALUE ESTIMATES

- BENEFITS NOT DOMINATED BY THE VSL AS WITH AIR POLICIES
- CHANGES CAN EASILY INFLUENCE THE OUTCOME OF A BENEFIT-COST ANALYSIS



POLITICALLY DRIVEN RESEARCH

RESEARCH OUTCOMES ARE DRIVEN BY HOW THE RESEARCH QUESTIONS ARE FRAMED



POLICY ANALYSIS GOALS

SCIENTIFIC CREDIBILITY BASED ON:

- TRANSPARENCY
- REPLICABILITY





WOTUS is a small
boat in a larger
storm
challenging
evidence-based
decision making