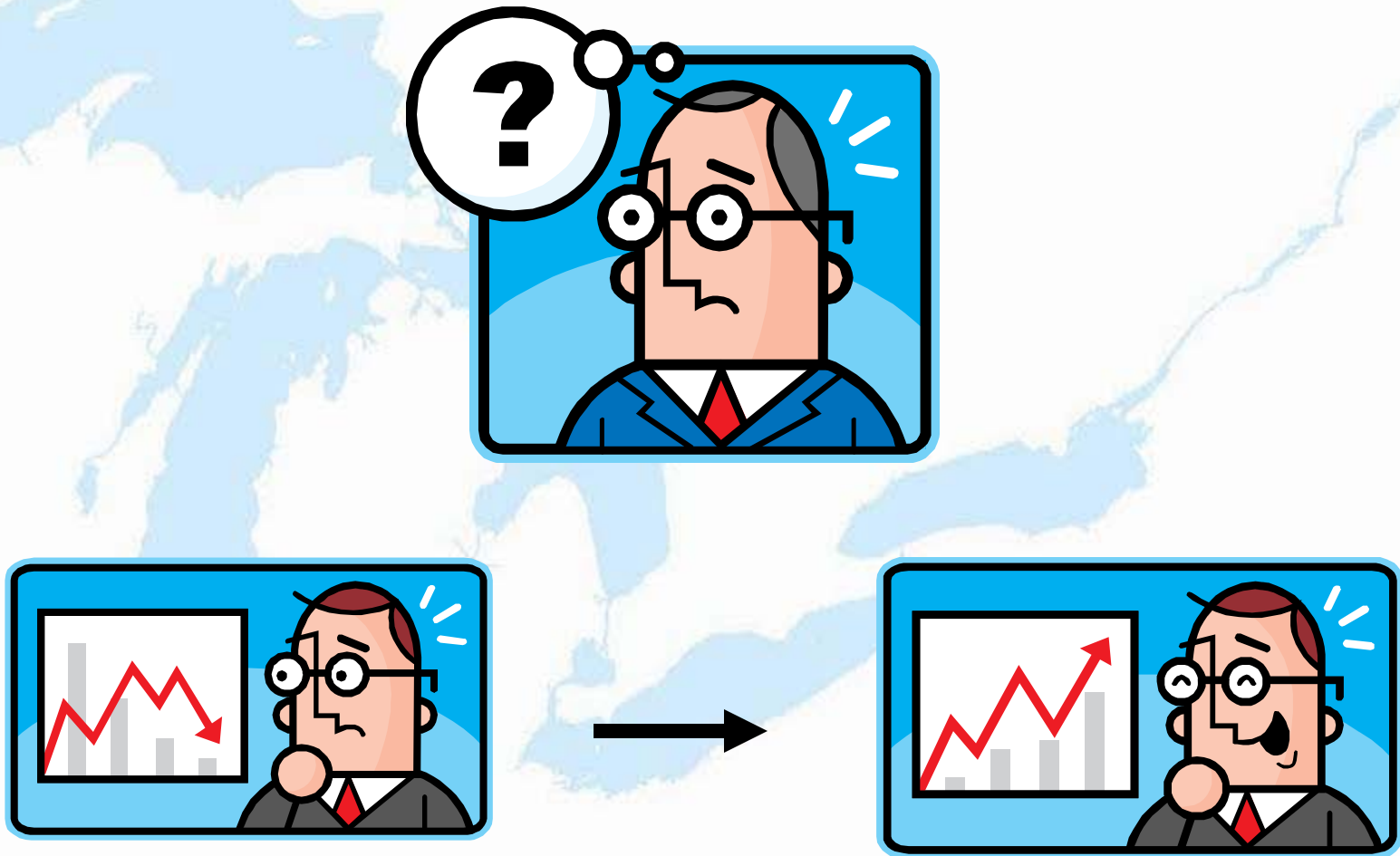


What's It All Mean?





Watershed Implications

- **22 of 102 HUC 8 watersheds (20%) are classified as vulnerable**
 - Low Flow Vulnerability
 - Cold water Resource Threat
 - Water Quality Sensitivity
- **A number of watersheds are on the edge between good and vulnerable conditions**



Future Energy Scenarios and Water Resource Impacts

- Impacts vary across basin
 - Greater impacts in vulnerable areas
- Results could be different –worse or better—depending on where new/different power generation occurs
- LOCATION MATTERS!
- Higher level of scrutiny when approving new power facilities, or any new water user, in vulnerable areas



Power Facility Siting Related to Water Resources Management and Compact Implementation

- Prior approvals
- Lower thresholds, particularly in vulnerable areas
- Consumptive use review as part of application
- Enhance “Adverse Resource Impact” definition
- Alternatives Analysis—should include need and consider conservation/efficiency options



Electric Power Regulations and Water Resources

- Regional Transmission Organizations (RTOs) are important forum for analyzing environmental impacts from power generation
- Great Lakes RTOs do not currently look at water impacts
- Institutional disconnect between state environmental agencies and utility commissions
 - Opportunities: water quantity impact assessment for certificate of need and siting approval; public disclosure of utility/power provider water use and consumption by source

GLEW Team

Advisors

- Alliance for Water Efficiency
- DTE Energy Company
- Edison Electric Institute
- Electric Power Research Institute
- Illinois Dept. of Natural Resources
- Michigan Dept. of Energy, Labor and Economic Growth
- New York Power Authority
- Ontario Power Generation
- Pennsylvania Dept. of Environmental Protection
- Recycled Energy Development
- U.S. Dept. of Energy, National Energy Technology Laboratory
- University of Texas, Austin
- We Energies
- Wisconsin Dept. of Natural Resources
- Wisconsin Public Service Commission

Core Team

- Great Lakes Commission
- Cornell University
- Argonne National Laboratories
- Sandia National Laboratories
- Great Lakes Environmental Law Center
- Environmental Law and Policy Center



Project Reports

www.glc.org/energy