



Including 20 of 100 top-ranked universities in the world, more than any other region...

Great Lakes' Top  
100 Ranked  
Universities in  
the World

Institution	Location	Rank
University of Chicago	Chicago, Illinois	9
Cornell University	Ithaca, New York	12
University of Wisconsin - Madison	Madison, Wisconsin	16
University of Michigan	Ann Arbor, Michigan	21
University of Toronto	Toronto, Ontario	24
University of Illinois - Urbana Champaign	Urbana-Champaign, Illinois	25
Washington University	St. Louis, Missouri	28
Northwestern University	Evanston, Illinois	31
University of Minnesota	Minneapolis-St. Paul, Minnesota	32
Pennsylvania State University	University Park, Pennsylvania	39
University of Pittsburgh	Pittsburgh, Pennsylvania	43
Carnegie Mellon University	Pittsburgh, Pennsylvania	54
McGill University	Montreal, Quebec	62
Ohio State University	Columbus, Ohio	63
University of Rochester	Rochester, New York	65
Case Western Reserve University	Cleveland, Ohio	69
Purdue University	West Lafayette, Indiana	75
Michigan State University	Lansing, Michigan	77
Indiana University	Bloomington, Indiana	87
McMaster University	Hamilton, Ontario	90

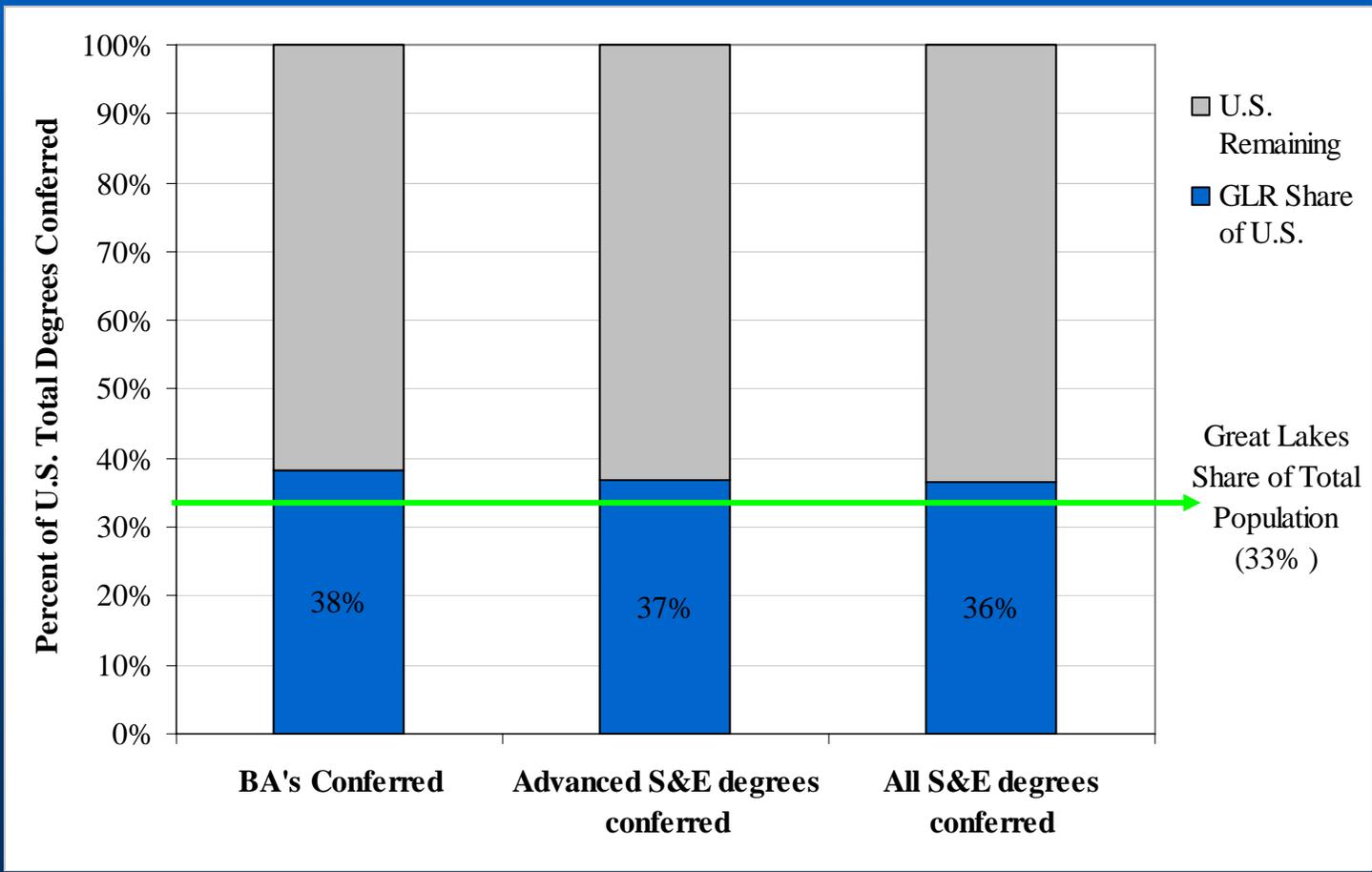
Source: Institute  
of Higher  
Education,  
Shanghai Jiao  
Tong University,  
2005



...that produce a huge amount of talent, particularly in the sciences and engineering

Great Lakes Regional Share of Degrees Conferred of Total U.S.

Source: U.S. Census Bureau, 2000 and 2005 American Community Surveys



A city street scene featuring a canal in the foreground. On the left, a building has a sign that says "BORDERS". In the center, a modern transit structure with a glass and steel canopy spans over the canal. On the right, a prominent white building with a blue-tiled tower is visible. The background shows various other city buildings under a clear sky.

*Region's cities have valuable infrastructure and new economy assets in place.*

- Waterfronts
- Transit/Transport
- Sewer, Water and Electricity
- Historic Buildings
- Urban Streets
- Civic and Cultural Institutions



*The Great Lakes Region has natural infrastructure central to sustainable economic growth in North America*

**1/5 World's Freshwater**

**Rich Natural Amenities:  
Forests, Rivers and Lakes**

**Environmental and Historical  
Recreation/Tourism**

**Opportunities for Water-  
Based Development**

**Potential to lead in “Clean-Green Technologies”:  
Energy, new fuels, transport and clean water**



Global trends mean fewer, bigger places are economic centers -- from farms, to factories, to dense and diverse urban communities that today are world's economic activity centers

Population  
Density per  
Square Mile

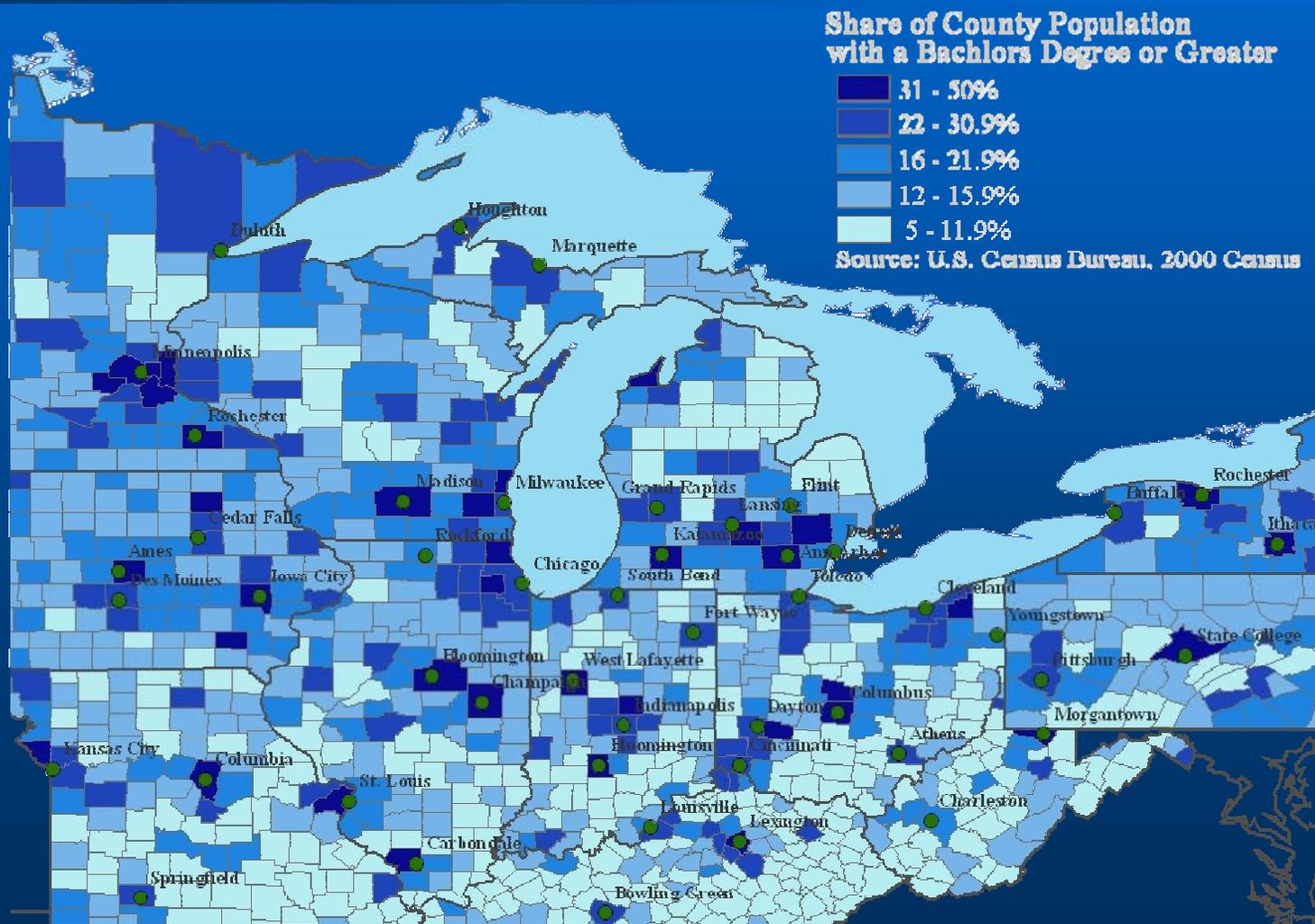
Source:  
S. Swan, UM  
CSCAR, 2003

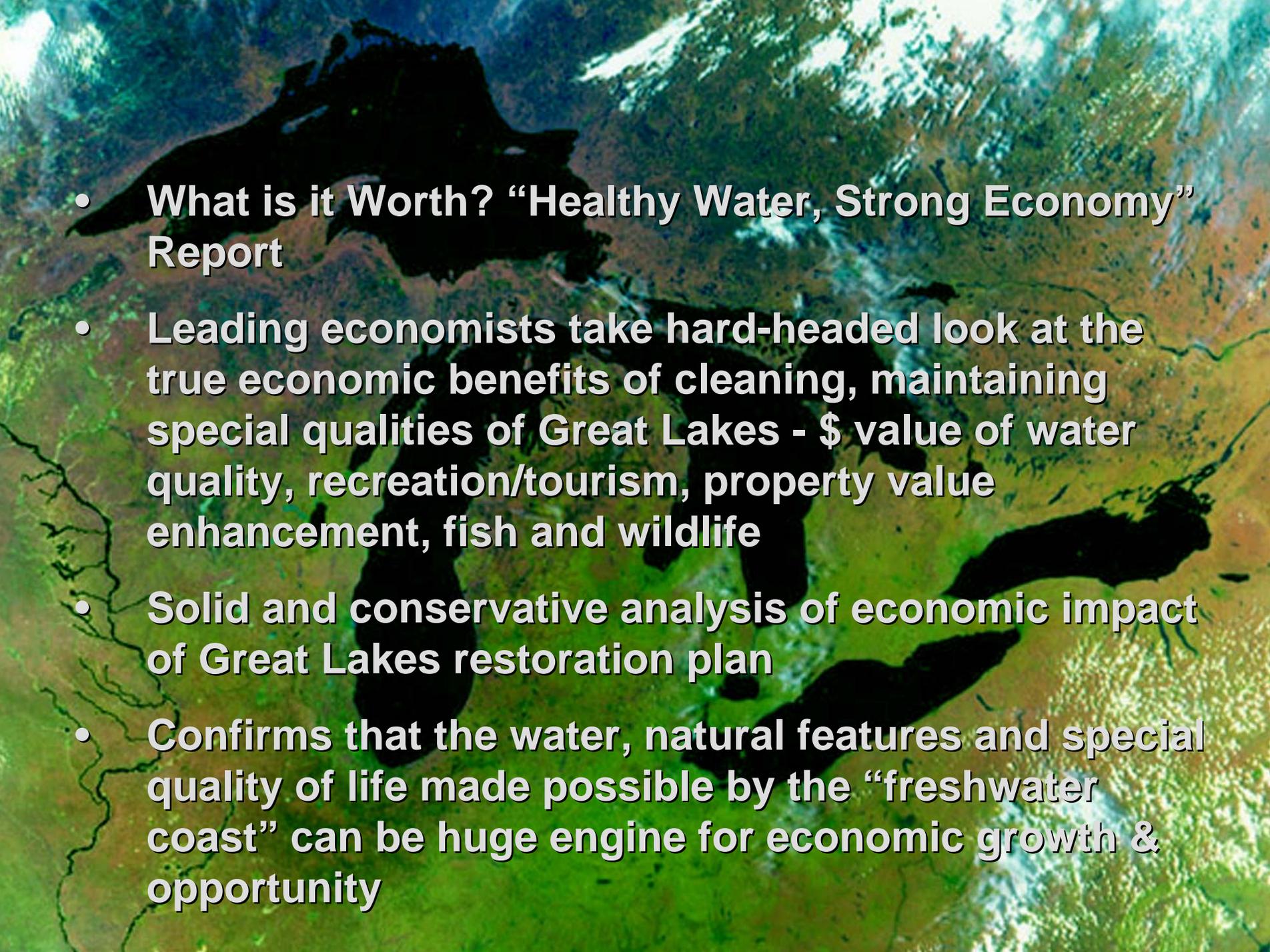




# Major metros, university towns and places with special quality of life are the talent magnets and activity centers

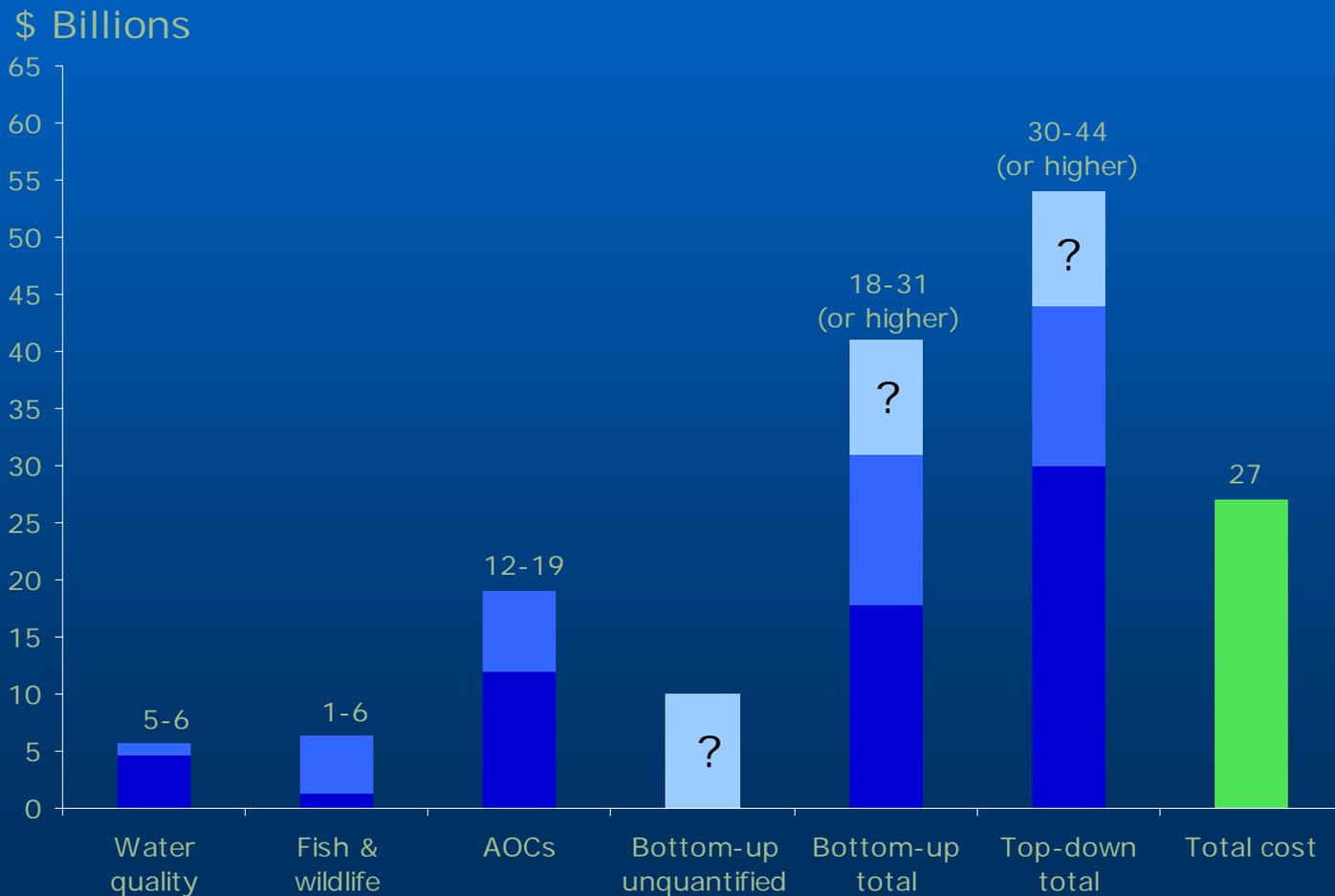
Share of County Population with a Bachelors' Degree or Greater, 2000



- 
- **What is it Worth? “Healthy Water, Strong Economy” Report**
  - **Leading economists take hard-headed look at the true economic benefits of cleaning, maintaining special qualities of Great Lakes - \$ value of water quality, recreation/tourism, property value enhancement, fish and wildlife**
  - **Solid and conservative analysis of economic impact of Great Lakes restoration plan**
  - **Confirms that the water, natural features and special quality of life made possible by the “freshwater coast” can be huge engine for economic growth & opportunity**



# \$ 80-100 Billion Economic Benefits for \$26 Billion Cost



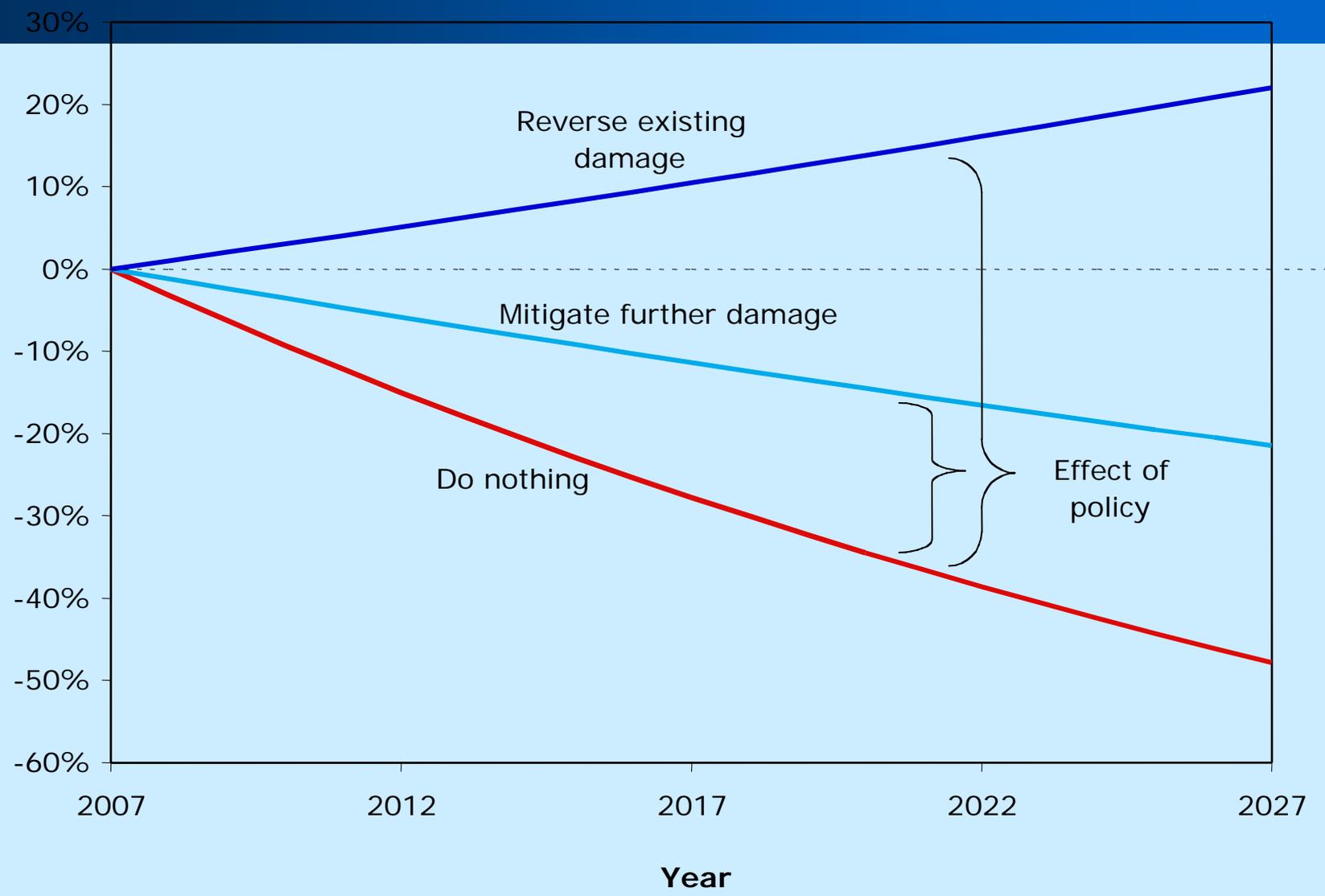
## Additional non-quantifiable, but real benefits

- Lower fish contamination levels = health & survival
- Invasives & nuisance species - avoided costs
- Ecosystem resilience to invaders & climate change
- Fewer algae blooms
- Human health, less sickness, life-spans
- Avoided engineering costs, Sediment dredging, removal, & disposal
- Less erosion and less severe flooding
- Enhanced groundwater supply
- Freshwater Technology jobs and business development
- Quality of life enhancement value
- Nonuse Values



# Benefits flow from reversing damage, enhancing assets

Percent change in ecological outcome relative to 2007



# Blueprint for Renewing GLER

Cleveland

## Fuel and Focus the Engines of Innovation

- Education the Talent Nation Needs to Compete
- Do the R&D in emerging New Technologies – Energy, IT, Health-Bio, Freshwater

Minnesota

## Sustainable development of the “Freshwater Coast”

- Freshwater Coast water-based economic development
- Follow through on Great Lakes Restoration plan

## Commercialize Innovation in Great Lakes

- Develop critical mass of capital and talent to
- Enhance-extend, venture and related capital pools
- Elevate U.S.-Canada Dialogue and Development

## Remake Employee-Benefits Compact

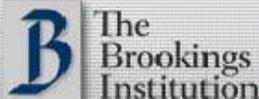
- Portable & Universal State/Regional Pensions and Health Care
- Training & Education to Encourage Labor Adaptability

Milwaukee

Detroit

# Great Lakes Economic Initiative: Next Steps

- Network/leadership Building in Region
- Further Policy Development – Make real the recommendations (like Great Lakes Restoration)
  - U.S. – Canada Bi-national Economy and Policy Implications
  - Global Center for Freshwater Research, Education & Tech.
  - National Energy Technology Strategy
  - New GI Bill – Kalamazoo “Promise” replication
  - Great Lakes Regional Venture Capital Strategy
- Policy Advancement – Opportunity ‘08



## METROPOLITAN POLICY PROGRAM

[Brookings](#) > Metropolitan Policy

July 1, 2004

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*Redefining the challenges facing metropolitan America and promoting innovative solutions to help communities grow in more inclusive, competitive, and sustainable ways.*

### ANNOUNCEMENT

## Urban Center Becomes Metropolitan Program

In a major promotion, the Center on Urban and Metropolitan Policy this month became the Brookings Metropolitan Policy Program—and the first new Brookings department established since 1948. The new status reflects the rising importance of metropolitan issues to the domestic and global challenges Brookings seeks to address.

▶ [read an open letter from Brookings President Strobe Talbott](#)

#### METROVIEW

##### Deficits by Design Plague Metro

by Robert Puentes  
*The Washington Times*  
June 21, 2004

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### METROPOLITAN GROWTH

#### Mechanisms for Market-Based Land Use Control

Using case studies and a national survey, this paper examines transfers of development rights (TDRs) and other market-based land preservation techniques like mitigation banking and density transfer fees.

### IMMIGRATION

#### Washington Goes Polyglot

Metro Washington's "limited English proficient" (LEP) population

