Freshwater Cleanup Technology Cluster

Cleaning the Water, Creating New Jobs

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Challenges and Opportunities

US Water Challenges: Atlanta; California; Las Vegas; Great Lakes, Midwest; Milwaukee; Waukesha; etc.

Global Water Challenges: China, India, Canada Africa, South America

Opportunity for M-7 Region: Build a truly significant water industry cluster to help address quality + quantity problems

Key Ingredients in Water Cluster Building

- A core of firms already in the industry
- Experienced talent in the region
- A talent development pipeline
- Collaboration among firms and w/water researchers
- Demand for solutions (money to support development)
- Desire by the private sector actors to grow
- Recognition by the larger community of the assets and potential
- Resources and leadership to help bring the necessary ingredients together

Ingredients in Milwaukee 7

- 1. 120 firms/ 5 of world's 11 largest water cos. / numerous manufacturers
- 2. Known concentration of water professionals
- 3. 5 engineering schools/ 87 freshwater researchers at three universities/ new School of Freshwater Science
- 4. New Water Council to promote collaboration between companies and with academia

Ingredients in Milwaukee 7, cont'd

 Some 50 water problems identified; some pressure for solutions; more needed
Water firms want to grow
Resonates with the larger community/ improve environment & create jobs/ push
Resources and leadership have come forth

Challenges

- Usual business challenges in region
- Overcome municipal reluctance to adopt new technology
- Speed openness to innovation in competitive bidding
- Increase collaboration, both academics & businesses collaborating with businesses
- Increase Water Council/Cluster visibility
- Increase number of water entrepreneurs
- Overcome regional inertia
- Learn how to truly link and leverage

<u>Successes</u>

Water Council active New levels of cooperation: business and academia New patent activity New international efforts 36 pages on Milwaukee/water in United airlines New commitment from Engineering Dean, UWM New efforts to look outside region

Regional Steps

- 1. Build national support for GL clean-up
- 2. ↑ federal \$\$ for SBIR/STTR in Water Tech
- 3. Push EPA to toughen water standards
- 4. Push sustainability agenda: virtuous circle
- 5. Push initiatives on new bio-fuels; e.g. algae
- 6. Push for Fed decision on ballast water
- 7. Get corporations & academia talking together
- 8. Solve our water problems and sell solutions to others