

New England Water Innovation Network



www.newengland-win.org

Water is Essential

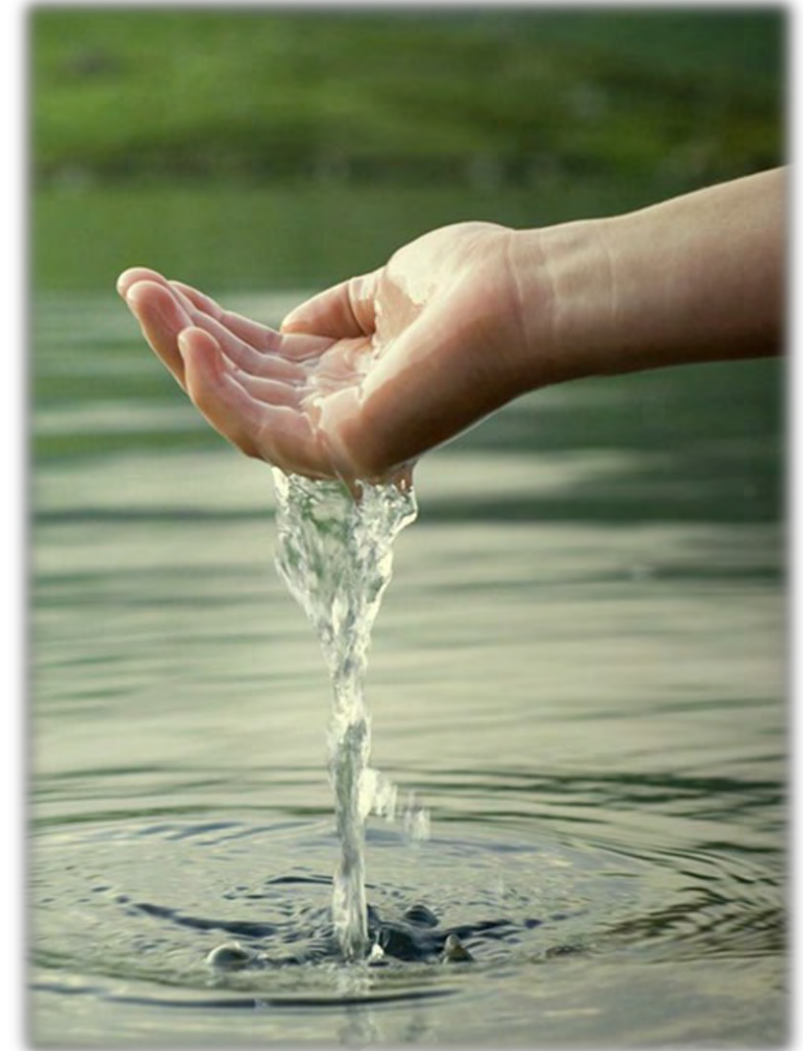
Safe, Abundant and Affordable Water for All

Water is our world's most pervasive and essential resource.

Unfortunately, many global trends are worsening water scarcity, quality and affordability, and in doing so, threaten security, health, environments and economies globally.

Today's challenges cannot be met with yesterday's solutions.

To make an impact, and realize safe, abundant and affordable water for all, we must broaden and accelerate innovation in the Water Industry.



NEWIN’s mission is make an impact on the global water challenges by working to broaden and accelerate innovation to market.



Patrick Administration Announces Formation of Network to Spur Water Innovation in Massachusetts and New England

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Jan 28, 2014 –

Patrick Administration Announces Formation of Network to Spur Water Innovation in Massachusetts and New England

MassCEC commits to matching \$100,000 in private investment to help launch network of water industry leaders

BOSTON – January 27, 2014 – The Patrick Administration today announced the formation of the New England Water Innovation Network (NEWIN), which will build upon the successes the Commonwealth and companies have had in creating more efficient and cost-effective water supply and wastewater treatment solutions to drive demand for Massachusetts-made products and services.

“In Massachusetts, we are marrying our brainpower with our natural resources in order to position ourselves as the home away from home for the water innovation industry,” said Governor Patrick. “The New England Water Innovation Network will be a voice for the industry and help Massachusetts and New England stake our claim to global leadership in water innovation.”

Energy and Environmental Affairs Secretary Rick Sullivan made the announcement as part of the New England Water Environment Association's (NEWEA) annual conference.

**Catalyze
Water Industry Collaboration**

Partnerships & Best Practice Sharing
Business Development
Technology to Innovation
Advocacy, Outreach & Communication

**Drive Local Innovation
for Global Impact**

Promote regional, national and global collaboration and partnerships to make an impact on the world’s pressing water challenges.

World-class Water Industry Institutions

Technology



Academia



Engineering



Emerging Technologies & New Companies



Support



Value for NEWIN Members:

“Solution Seekers”



For Industrial Water Users and Established Industrial Providers

- Access to cutting edge research, new companies, solutions and talent
- Global partnerships
- Discount services
- NEWIN marketing and advertisement



For Public Water Utilities

“Solution Providers”



For New Technology Companies

- Industry needs identification
- Business development
- Research collaboration
- Access to ‘Test Bed Network’
- Professor and student exchanges; internships, student hiring
- Support in grant submissions



For Academic Partners

“Ecosystem Enablers”



For Private Equity and Foundations

- Business development
- Insight into market trends
- Domain knowledge and deal flow
- Industry needs identification
- Focused opportunities for impact investing and risk management



For Professional Service Providers

Value for NEWIN Members:

Case Example: Symposium on Water Innovation in Massachusetts (SWIM)

Confirmed Presenters include



Deval Patrick
Governor of
Massachusetts



Gretchen McClain

The Symposium on Water Innovation in Massachusetts

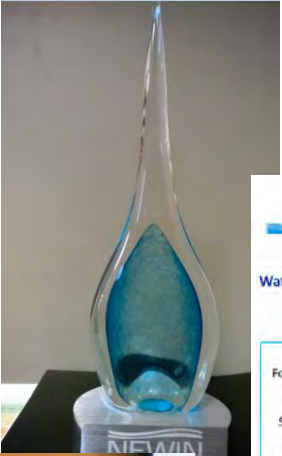
See video

is our industry's gathering of senior executives working in collaboration to further the state's position in the global marketplace. This year's conference, SWIM'13 occurred on **Wednesday, June 19, 2013** and convened top leaders who explored global opportunities and how the industry can accelerate the delivery of innovative solutions to the world's water needs. Governor Deval Patrick summed up the symposium by saying "What we're trying to do is marry brain power, our natural resource, with commerce, through innovation. It's not that complicated, but it is a winning formula." **SWIM '13**

▪ An all-day conference for over 150 invited

- SWIM convenes 200 of the top regional water industry leaders from Industry, Academia, Finance and Government
- SWIM participants workshop critical issues for accelerating innovation in the water industry, and network with
- A SWIM highlight is the Headwaters Innovation Prize – which is an award for the best business plan for Water Innovation. The 2013 Winner, Drinkwell, is focused on delivering clean water to Indian Villagers using a combination of novel technology and a micro-finance business model.

Leadership Conference November 2014



NEWIN
2014 Water Leadership Conference
 Water and Wastewater Utility Challenges and Opportunities: The Role of New Technology
 Wednesday, November 19th, 2014
 Worcester Polytechnic Institute

Follow NEWIN on Twitter @NEWIN_H2O & Share your thoughts at the conference #waterleaders2014

Join the NEWIN LinkedIn Group

Sign up for the NEWIN H2Obytes Water News and Events Digest on our website newengland-win.org

NEWIN Water Leadership Conference Program

| | |
|------------|--|
| 8:00 a.m. | Registration and Networking Continental Breakfast |
| 8:45 a.m. | Welcome & Introductions: Chair/Program Moderator – Ned Bartlett, Bowditch & Dewey Introduction of NEWIN and WPI – Earl Jones and Karen Oates |
| 9:00 a.m. | Water and Wastewater Utility Challenges and Opportunities Panel Discussion |
| 10:15 a.m. | Coffee Break & WPI Student Water Research Poster Exhibit |
| 10:40 a.m. | CoMag Technology Case Study (with Q&A) - Town of Concord |
| 11:10 a.m. | Advising Public Sector Clients on the Use of Technology: The Issues Communities Face |
| 11:40 a.m. | Legislative Update – The Honorable Representative Carolyn Dykema |
| 12:00 p.m. | Lunch |
| 12:45 p.m. | WPI'S Water Research |
| 12:50 p.m. | State of Water and Wastewater Technology in US |
| 1:20 p.m. | The NEWIN Water Leadership Award |
| 1:35 p.m. | Finding Solutions – Massachusetts Water Cluster Panel Discussion |
| 2:50 p.m. | Next steps/Action Items – Program and Panel Moderators |
| 3:00 p.m. | Adjourn |



NEWIN Sponsors and Partners



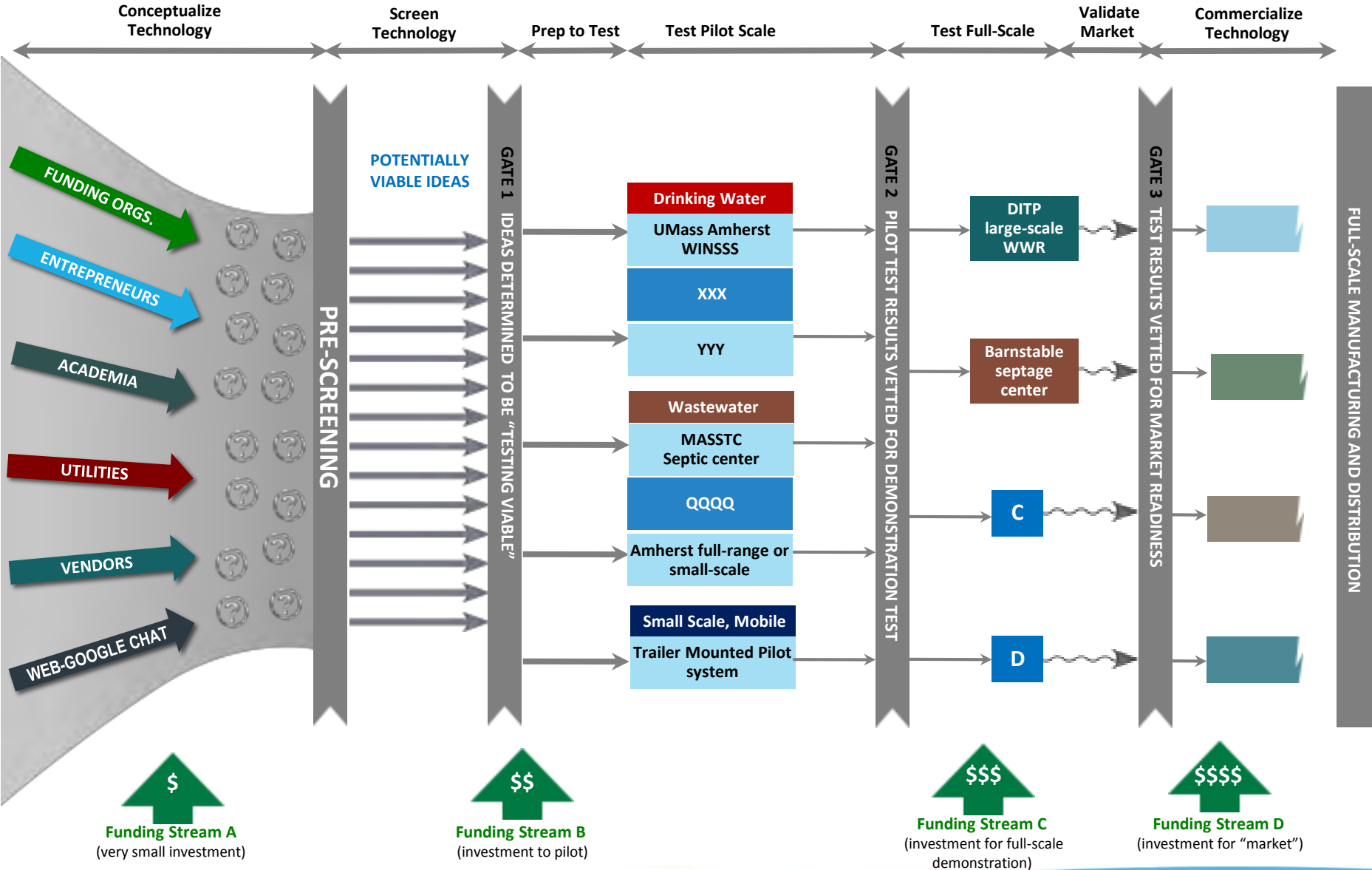
- Technical Innovations need to:
- Protect the public health
 - Be proven
 - Work with regulations
 - Anticipate regulatory changes
 - Be cost effective
 - Be reliable and able to maintain long-term
 - Be accepted by the public

New England Water Innovation Network *Test Exchange*



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Technology to Innovation: A Three Step Approach



Next Slide

Pre-screening

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Diagram](#)

Technology is vetted by NEWIN using template.

- Technical viability
- Market potential
- Order of magnitude cost to pilot test

Gate 1: “Testing viable” Determination

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Company is interviewed by NEWIN using template.

- Suitability for piloting (readiness)
- Best location
- Piloting cost and schedule
- Testing protocol, metrics and criteria for success

Gate 2: Pilot Results Vetted for Full-Scale

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Diagram](#)

Testing data is analyzed and technology is screened for demonstration.

- Validation of technical viability
- Metrics and criteria compared
- Market potential confirmed
- Estimate location, protocol, schedule, cost to demonstration test

Gate 3: Demonstration Results Evaluated, Market Readiness Determined

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Diagram](#)

Testing data is analyzed and technology is screened for demonstration.

- Validation of technical viability
- Metrics and criteria compared
- Market potential confirmed
- Determine market readiness- technical readiness, commercial readiness

Water Innovation Network for Small Sustainable Systems WINSSS

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Diagram

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| <p>Description: National center for small drinking water systems funded by USEPA. Four research programs:</p> <ul style="list-style-type: none"> • Implementation of innovative technologies that are specifically designed for, or particularly apt for, small water systems. • Non-treatment innovations with focus on overcoming regulatory barriers, developing and implementing software for improved asset management, and creating distributed sensing networks for small water systems. • Assessment and development of treatment processes for better control of hazardous disinfection by-products (DBPs) in small water systems. • Development and implementation of improved biological management of nitrogenous contaminants the negatively impact human health and water quality in small water systems. | <p>Water Type, Flows, : Drinking Water</p> |
| <p>Parent Organization, Location, Contact: UMass Amherst, Amherst, Massachusetts www.umass.edu/winsss</p> | <p>Services Offered/Equipment/Capabilities:</p> |

MASSTC Septic Center

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| | |
|--|---|
| Description: | Water Type, Flows, : Septic Wastewater, |
| | Services Offered/Equipment/Capabilities: |
| Parent Organization, Location, Contact: | |

Amherst Full-Range or Small-Scale

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| | |
|--|---|
| Description: | Water Type, Flows, : |
| | Services Offered/Equipment/Capabilities: |
| Parent Organization, Location, Contact: | |

Trailer Mounted Pilot System

Return to Diagram

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|---|--|
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| <p>Parent Organization, Location, Contact: UMass Amherst, Amherst, Massachusetts www.umass.edu/winsss</p> | <p>Services Offered/Equipment/Capabilities:</p> |

Oasys Water Named to the 2014 Global Cleantech 100

List Recognizes the Top Private Companies in Clean Technology

CAMBRIAN INNOVATION ABOUT SOLUTIONS RESOURCES

Cambrian Innovation Selected as 2015 Technology Pioneer by World Economic Forum

Award validates innovative bioelectric solution addressing global water crisis

Feature

Innovation Nation: The Top 12 Water Technology Hot Spots In America

By Laura Martin, associate editor, Water Online



MIT News
ON CAMPUS AND AROUND THE WORLD

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MIT alumnus Mohammed Abdul Latif Jameel gives major gift to solve urgent challenges in world food and water security

Professor John Lienhard will lead the new laboratory.



NEWIN and the MassCEC helped local start-up Desalitech ink a global alliance with Japan's \$6B/yr Toyo Engineering

In the News



UMASS Amherst won \$4MM grant to develop a Water Innovation Network for Sustainable Small Systems



Members of NEWIN and MassCEC meeting with Singapore PUB Leadership

June 12, 2014

Become a NEWIN Member or Make a Donation

NEWIN Membership is available to organizations and individuals who believe in the power of innovation to help solve our global water challenges.

To learn more about NEWIN, to inquire about becoming a NEWIN member, or to make a donation, please send inquiries to:

contact@newengland-win.org



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