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Opinion

GUEST OPINION: New water technologies could spur jobs

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By John McCulloch

Emerging new water technologies are on the ascendancy, but relatively few places in the country or internationally are taking notice of the potential benefits to consumers in this exciting and rapidly developing new field. The Oakland County Water Resources Commissioner's Office does recognize the advantages of riding the tide of this new technology as far as it will take us because of the amazing results it can deliver to our customers.

Recently, I attended the WATEC Conference in Israel, which brought together companies from around the world that are involved in developing new water technologies. To assist in the introduction of some of the most promising new technologies we found, I created H2Opportunities, a nonprofit, statewide business accelerator designed to assist technology providers by providing a platform to test, validate and permit their technologies. H2Opps has partnered with the Michigan Economic Development Corporation to assure that, if successful, introduction of these new technologies results in economic development and manufacturing, marketing and engineering jobs here in Michigan.

One of the more exciting of these new technologies is produced by an Israeli company that utilizes what is called "Rotating Biological Contractor" technology. This process utilizes rotating discs to breakdown wastewater in order to prepare the effluent for discharge into groundwater or surface water that meets or exceeds permit requirements. This low-cost distributive wastewater treatment is designed to assist small cross-road communities with low water flow, but high water tables, where typical septic systems have failed them. Through the use of modular wastewater treatment units, this technology can be expanded to accommodate changing needs over time, making this a cost-effective alternative to building and maintaining large wastewater treatment plants.

Another Israeli firm, VBact, has come up with an innovative technology solution that has enormous implications for beach closings and food processing plants. Using this innovative process, health departments can test for E.coli levels in lakes and get the results back in minutes, rather than waiting twenty-four hours to learn if E.coli levels exceed acceptable standards. Under the current system, people continue to swim in what may be highly polluted water until the test results are known. With the VBact technology beaches can be closed immediately if necessary. Furthermore, the current waiting period to test again is reduced from three days to just minutes, so that, if E. coli levels return to acceptable levels, beaches can be reopened much more quickly. Food processing plants also will be able to employ this new technology to instantaneously test for the presence of E.coli and other contaminants in their products before they reach the marketplace.

Another promising new water technology is called EZ Pack that has been developed by another Israeli firm. It provides for the safe storage of water for extended periods of time. This technology has wide-ranging applications for our department as well as the military, emergency management, health departments, camp sites and remote areas. Water stored inside inflatable "pillow packs" can be easily transported to any location by trucks, and the unique thing about them is that they can safely store water for up to three months, something which is not now possible. The pillow packs

obviate the need to purchase and distribute hundreds, if not thousands, of small bottles of water, which can be time consuming and costly during times of crisis, such as occurred with Hurricane Katrina or the blackout of 2003.

All of these technologies hold the promise of creating new jobs, generating new economic investment, improving water system efficiency, making water safer and lowering costs, which should come as good news for taxpayers worried about escalating water rates.

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