Candidate: Tom Greenhaw

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Q) Do you support installing disinfection technology at Stickney, the world’s largest wastewater treatment plant?

A) I absolutely support the installation of disinfection technology at the MWRD’s Stickney water reclamation plant. Recently, the MWRD has installed disinfection technology at their Calumet and O’Brien plants. By disinfecting effluent at these two plants, the waterways where the vast majority of recreational activity is taking place (the Chicago River and the Little Calumet River) will have much lower bacteria levels. While the Stickney plant is much farther downstream, where less recreation is taking place, I believe disinfection technology should be installed to improve the water quality of the Lower Des Plaines River. Because more recreation takes place near the Calumet and O’Brien plants I think it was appropriate to install disinfection technology there first, and with those projects complete I would be an advocate for disinfecting effluent from the Stickney plant next.

Q) How would you improve the current phosphorus-removal plans underway at the MWRD? Do you think this important? If so, why?

A) The effluent released from MWRD wastewater treatment plants has been found to be the largest single contributor of phosphorus and nitrogen found in the Gulf of Mexico’s “Dead Zone” – a huge area where oxygen levels in the water are so low that fish and other wildlife cannot survive there. This is a very important issue that must be tackled.

The MWRD has made great strides in reducing the phosphorus levels of it’s effluent over the last five years, and I am a supporter of these efforts and would push to lower levels even further. While phosphorus is a contaminant when found in our waterways, it also serves a very useful purpose as a fertilizer in areas with low phosphorus levels in their soil. The MWRD is transforming itself from a wastewater treatment utility into a resource recovery agency, with phosphorus removal at the forefront of this transformation. For example, the Stickney wastewater treatment plant is installing technology that will come online in 2016 that will remove enough phosphorus to generate over 10,000 tons of fertilizer each year. This fertilizer is a valuable product that can be sold to generate revenue for the District while also improving water quality, a true win-win situation. I will be an advocate of installing this technology at other wastewater treatment plants where appropriate, along with implementing other phosphorus removal technology improvements as they become available.

Q) Do you support any alternatives to maximize the capacity of the Tunnel and Reservoir Plan? Which ones do you support?

A) With the Thornton Reservoir recently coming online last year, and the McCook Reservoir on its way to completion, much of the Tunnel and Reservoir Plan (TARP) is now in place. TARP is one of the largest civil engineering projects in history and will have the capacity to hold 17.5 billion gallons of sewage and stormwater when finished. It is a truly incredible engineering and construction achievement that will no doubt have a big impact on improving water quality and reducing flooding and combined sewer overflows.

With TARP largely in place, I believe the MWRD should fully embrace “green infrastructure” in its future stormwater management efforts. Green infrastructure such as permeable pavement, green roofs, and rain gardens are designed catch or slow rainwater before it ever enters the sewer system.

In early 2015 I conceived of an idea for legislation that would incentivize green infrastructure by providing a property tax exemption if some form of green infrastructure was installed on the property. The idea was drafted into a bill and submitted by Rep. Robert Martwick as HB3516. While the bill gained the support of the Illinois Environmental Council, the bill was not called and thus was not passed. I will continue to promote innovative ideas such as this one, and hope that if elected as a Commissioner I will be a stronger advocate for these types of legislative initiatives that would incentivize green infrastructure throughout Cook County.

Q) What do you think the MWRD’s role should be in reducing chloride usage?

A) A new water quality standard for chloride goes into effect in 2018, and the Illinois EPA has tasked the MWRD with guiding a stakeholder workgroup to determine the best course of action to comply with this new standard. As the MWRD is in the lead on this effort, the District should work with other stakeholder municipalities and agencies to establish best practices and guidelines for reducing chloride usage.

Much of the chlorides found in our waterways are a result of using salt to de-ice roads when it snows. There are many ways to reduce the amount of salt used to de-ice, from simply training salt truck drivers to spread less salt all the way to using an alternative such as beet juice. As the leader of the chloride stakeholder workgroup, the MWRD should advocate for alternatives to road salt.

The MWRD also releases chloride in its effluent, partially due to its use of ferric chloride in the wastewater treatment process. The MWRD is moving away from the use of ferric chloride and I would be an advocate for discontinuing its use in favor of alternatives.

Q) What should the MWRD’s role be in reducing combined sewer overflows? What is the MWRD’s role in informing the public about CSO’s? How would rate the MWRD’s performance in informing the public about CSO’s, and why?

A) As the MWRD’s core mission is stormwater management and wastewater treatment, it is clearly best positioned to take action to reduce combined sewer overflows. Since wastewater and stormwater enter the same combined sewers, during heavy rainfall the sewers can fill to capacity resulting in a mixture of untreated raw sewage and stormwater overflowing into our waterways. The Tunnel and Reservoir Plan will help minimize CSO’s as the system of tunnels and reservoirs can retain billions of gallons of what would have overflowed in the past, but it will not completely eliminate CSO’s.

Some have advocated for replacing combined sewers with separate sewers for stormwater and wastewater, but replacing the thousands of miles of sewer lines throughout Cook County could cost over $100 billion and is not feasible. I am an advocate for utilizing green infrastructure that catches rain where it falls, as it does naturally, where it can infiltrate into soil or slow its entry into the sewer system. Widespread implementation of green infrastructure will no doubt reduce the number of CSO’s, and it is the way forward now that TARP is nearing completion.

When it comes to informing the public about CSO’s, I believe the MWRD has room for improvement. There is a wealth of information on the District’s website but it is not always presented in a user-friendly manner. For example, the MWRD offers both email and text message alerts when a CSO is taking place, but how many members of the public are aware of this service? It is great that the information is there but it must be made more accessible, and I will support efforts to accomplish that.

Q) How do you the see role of wastewater treatment agencies changing over the next 10 years?

A) Wastewater treatment agencies are transforming into resource recovery agencies, and the MWRD is one of the agencies leading this transformation. The District has a constant stream of the “raw materials” needed to generate energy through biogas and create both phosphorus and biosolid fertilizer products, and it has been investing in new technology to do just that.

For example, the District has set a goal of being energy-neutral by 2023 and the only way to achieve this is through the use of biogas technology. A variety of different gasses prevalent in the wastewater flowing into MWRD treatment plants can be used to generate energy, and this is beginning to be utilized at the district to power its treatment process. It is likely that there is even more energy potential with biogas than is required for the District’s usage, so finding ways to send it to the grid or further refine it into a natural gas product should be explored.

The MWRD is also installing technology at its Stickney wastewater treatment plant that will remove enough phosphorus to generate over 10,000 tons of fertilizer each year. This fertilizer can then be sold to generate millions in revenue that will offset its cost and generate a return on investment for taxpayers.

Transforming the MWRD into a resource recovery agency will both improve our environment and improve the District’s financial footing, and this transformation will accelerate over the next 10 years as new technology makes it possible.

Q) Should the MWRD set a goal of making Chicago area waterways clean enough for swimming?

A) Setting a goal to make the Chicago area waterways clean enough to swim would be a noble goal, although I do not believe it is a realistic one today.

Bacteria levels in our waterways have been high for two reasons, combined sewer overflows and the lack of disinfection technology at wastewater treatment plants. While effluent is finally starting to be disinfected as some MWRD plants, CSO’s still occur.

Our sewer system is designed to overflow into these waterways during periods of intense rainfall. Due to climate change we are having more rain falling in shorter periods of time than ever before, with so called “100-year” storms happening much more frequently than should be expected. Despite our best efforts and intentions, it may be impossible to completely eliminate combined sewer overflows.

That being said, I think the MWRD has done and can do more to lessen the number of CSO’s that occur. Widespread green infrastructure, working in tandem with TARP, will result in less untreated sewage and stormwater entering our waterways. Less CSO’s and effluent disinfection are making our waterways cleaner and more accessible to recreational activities like boating and kayaking, but setting a goal to swim in Chicago’s waterways is a long way from being realistic today. I wouldn’t oppose setting this goal, as long as it’s understood that it wouldn’t be achieved until far into the future.

Q) What should the MWRD’s role be in addressing Asian carp and other invasive species in Chicago area waterways?

A) I believe it is very important for the MWRD to take a leadership role in addressing the transfer of aquatic invasive species, and the District should work together with the Army Corps of Engineers and other local stakeholders on this issue. Any plan implemented that will prevent the transfer of aquatic invasive species will be large in scope and will undoubtedly remain in place for the foreseeable future, so it is important for the MWRD to be involved every step of the way.

While the reversal of the Chicago River was an amazing engineering achievement that helped solved a public health crisis in its day, wastewater treatment technology has since come a very long way and it is time to discuss separation to solve the aquatic invasive species transfer problem it has created. Since the Chicago Sanitary and Ship canal plays an important role today in both transportation and stormwater management this would undoubtedly be a complex project, but I believe a solution can be found that will have more long-term benefits than short-term costs. Permanent separation is one option, another being a technology solution such as a specialized lock system that would prevent the transfer of invasive species.

I also believe the District should move towards a solution with much more urgency. Having attended the District’s study session laying out the variety of options proposed by the Army Corps of Engineers, where one of the options considered was “do nothing”, I am concerned about the slow pace of decision making when it comes to confronting aquatic invasive species. The slow pace is putting our waterways at risk, along with taxpayer dollars if a course of action is decided upon that is too little, too late.

Q) The MWRD is Cook County’s second largest landowner. Does the District have a responsibility to ensure companies to which it leases land are good environmental stewards?

A) The MWRD should always be a good environmental steward, and that should extend to its portfolio of land including properties that have been leased to others.

I was shocked to read the Sun-Times report last year about a company leasing MWRD land that has had both antifreeze and oil spills on its property. The MWRD should have the ability to break leases with tenants who are harming the environment – and should utilize that power when it is clear a tenant is not being a good environmental steward of the land.

Q) How would you rate the current performance of the District?

A) I believe the MWRD is currently performing its mission well, but it must continue heading in the right direction.

The District is at a crossroads with TARP nearing completion, and it must begin embracing green infrastructure to further mitigate flooding and reduce CSO’s. The District’s financial footing is solid, with pension reforms being signed in 2012 and new revenue streams becoming available as the agency begins recovering resources during the treatment process. Disinfection technology is finally being utilized, but can still be expanded at other wastewater treatment plants.

There is room for improvement in the District’s performance, but overall I would rate its current performance as good.

Q) What should the District’s role be in coordinating efforts with other government agencies in the Chicago area watersheds to manage those watersheds?

A) I believe that the MWRD, the City of Chicago, and other municipalities and agencies throughout Cook County need to work hand in hand when it comes to improving water quality in the Chicago Area Waterways.

The MWRD has a responsibility to be a good steward of the Chicago area waterway system due to the impacts of the wastewater treatment process, and as such they should take a leadership role in these efforts. Since the District’s mission is wastewater treatment and stormwater management, it has the knowledge and expertise to guide the efforts of others in the region.