Chicago Wilderness panel sheds light on future of Chicago area waterways

The Chicago River is quickly becoming Chicago's second waterfront, and the river's past, present and future was the focus of a panel held during the 2012 Chicago Wilderness Congress at the University of Illinois at Chicago on Nov. 15. Chicago Wilderness is a regional alliance dedicated to protecting nature and enriching life.

The "Reimagining the Chicago and Calumet Rivers for the 21st Century and Beyond" session featured Dr. Reuben Keller, Professor of Environmental Science at Loyola University Chicago, Metropolitan Water Reclamation District of Greater Chicago (MWRD) Commissioner Debra Shore and Executive Director David St. Pierre, and Josh Ellis, Program Director, Metropolitan Planning Council.

"Typhoid fever and cholera posed significant public health threats so to prevent future outbreaks, the Illinois legislature established the Sanitary District of Chicago in 1889, now the MWRD," Commissioner Shore explained. "The District broke ground on the main channel of the Sanitary and Ship Canal three years later and completed the project by 1900, reversing the flow of the Chicago River. Water was diverted from Lake Michigan to dilute sewage and flush it downstream."

Commissioner Debra Shore and MWRD Executive Director, David St. Pierre.

Construction of seven wastewater treatment plants followed over the years. Now the MWRD is installing disinfection equipment at the Calumet and Terrence J. O'Brien (formerly the North Side) Water Reclamation Plants. Once the Tunnel and Reservoir Plan's Thornton Reservoir comes online by 2015, the quality of the CAWS and incidents of flooding will drastically improve.

St. Pierre discussed the MWRD's plans for the future and the improvements that will benefit water quality. One stretch of the Chicago River is of particular concern, Bubbly Creek. "For over 100 years the site suffered from significant abuse, and we are making headway in reversing the effects of Bubbly Creek's history," explained St. Pierre. "That's why our partnership with the University of Illinois is vital. Having a better understanding of the pollutants can help us learn what processes are needed to make water quality improvements."

The MWRD is also pursuing best practices for the recovery and reuse of phosphorus and nitrogen from the wastewater treatment process. "in excessive amounts, these nutrients impact water quality, but if they are removed from the water stream, they can be returned to the soil as fertilizers for agriculture production," said St. Pierre. "This is one of the many processes the MWRD is currently pursuing that will have a positive impact on water quality."