

Construction of the flood protection infrastructure project in Valley City in 2018.

WATER COMMISSION IMPLEMENTS NEW PROCESSES

In 2017, the North Dakota Legislature directed the State Engineer to: "develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than one million dollars, and a life cycle analysis process for municipal water supply projects. When the State Water Commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, the State Engineer shall review the economic analysis or life cycle analysis, and inform the State Water Commission of the findings from the analysis and review."

Duane Pool, Natural Resource Economist, was hired in March and joined the State Water Commission (SWC) staff to help implement economic based analyses for water conveyance and flood control projects with a total cost of one million or more, and life cycle cost analyses for municipal water supply projects. Pool will work with constituents to complete analyses and provide feedback and results to the State Engineer, SWC, and the respective program sponsors.

State Engineer Garland Erbele said, "Pool brings a wealth of knowledge to the SWC and has a background in economics, GIS, and most recently served as the Administrator for the Bottineau County Water Resources District. His expertise will play an invaluable role in our agency."

The purpose of the Life Cycle Cost Analysis is to identify and calculate all costs associated with a project, over the entire life of the project - from planning and design, through construction, operations and decommissioning. The purpose of Economic Analysis is to quantify the benefits and costs associated with the development of a project. This quantification then helps to identify if there will be a positive economic return to the state, when public dollars are being invested. Pool stated, "The Legislature's direction to include economic approaches support an informed decision-making process for the project sponsors and the State Water Commission, as well as, a better understanding of the efficient allocation of cost-share program resources."

In response to the Legislative directive, the State Water Commission contracted with HDR Inc. to develop Life Cycle Cost Analysis (LCCA) and Economic Analysis (EA) guidance documents that are meant to provide a process for conducting both types of analyses. In addition to the traditional written guidance document, the agency went a step further, thinking outside of the box. The Water Commission also asked the contractor to assist in developing electronic fillable models that can be used by the agency and project sponsors to more rapidly and cost efficiently conduct and complete LCCA and EA. "Traditionally a project sponsor would hire an economist to conduct an EA for each individual project. This could take additional time and resources," noted Pool. "By using the fillable model, rather than traditional means, this will place less of a financial burden on the state and on local water project sponsors when the projects being pursued are statutorily required to involve LCCA or EA."



Attendees at the LCCA and EA workshop held last summer.

To ensure stakeholders were included in the development of each guidance document, public comments were solicited and a free workshop was held in Bismarck. The workshop held at BSC was intended to educate project sponsors or their consultants about the new guidance and models for the EA and LCCA processes that have been developed.

Having received State Water Commission approval in August, both the LCCA and EA will be implemented for those projects seeking cost-share assistance from the Water Commission starting with the 2019-2021 biennium.

Implementation of the LCCA and EA will help to ensure that the state is making more informed decisions about returns to the state when the state is being asked to participate as a cost-share partner.





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