

DEVELOPING AND MAINTAINING OUR STATE AND LOCAL WATER INFRASTRUCTURE

Issue Statement

Water infrastructure in Kansas—dams, levees, reservoirs, treatment plants, distribution lines—was mostly developed 50 to 60 years ago and much of it is now in need of upgrade, repair or replacement. Reservoirs are filling with sediment, distribution and collection lines leak, treatment plants are challenged to meet public health standards and many levees and dams may no longer be able to provide the desired or needed level of public safety protection. Because much of this infrastructure was developed and built during the same time frame, the need for rehabilitation or replacement of it will also need to occur at about the same time. Concurrently, new infrastructure needs come with continued growth in the state.

Development and maintenance of public infrastructure is shared among all levels of government. The federal government role is largely financial and technical assistance; state government provides standards for design, prioritization of need, financial leverage and management of available federal funds and local government is largely responsible for planning, financing and implementing projects. Resource needs for infrastructure development, maintenance and rehabilitation are considerable and growing.

Why is this issue important to Kansas

Protection of public health, safety and welfare are key missions of many federal, state and local programs. Adequate water supply for drinking, commercial and industrial needs into the future is essential to the continued viability of many areas of the state. Proper wastewater management treatment and disposal protects the quality of those water supplies and supports public health. Property and lives need to be protected from the possibility of dam or levee failure. It is possible that upgrades to existing infrastructure to increase resiliency to changes in projected precipitation amounts and timing due to a changing climate will be needed.

What gaps need to be addressed to meet this goal

A primary gap is financial resources to address the problem. Various reports completed in the last several years estimate drinking water infrastructure (pipes, treatment plants, etc.) needs in the state of \$4 billion over the next 20 years. An additional \$3.2 billion in wastewater infrastructure needs is also reported. Much of this need is for small and medium size systems that generally have fewer re-

sources to capitalize the costs. An additional gap is knowledge about the condition of specific existing water infrastructure. Past management has primarily focused on responding to immediate repair and maintenance needs rather than a systematic approach to ensure that failures do not occur.

Reservoirs are critical infrastructure to continue to provide adequate future water supply. A report completed in 2010 estimates that the financial needs to secure, protect and restore storage is over \$483 million in the next 10 years, increasing to \$3.9 billion over the next 40 years. This cost is on top of the costs provided above for other infrastructure associated with water collection, treatment and distribution. This estimate includes rehabilitation of dams to assure safety, but does not include the needed costs associated with levee rehabilitation which is important to protect life and property from catastrophic failure during floods.

Overall approach to closing the gap

This principle is closely aligned with other guiding principles of the Kansas Water Plan (KWP), especially ensuring each citizen has a reliable water supply and reducing vulnerability to extreme events.

For water and wastewater infrastructure projects, funding agencies participate in joint reviews and a standing committee has been formed to address issues and needs. A list of priority projects based on total identified needs should be developed to support the use of increasingly limited state and federal funds in a more efficient manner to address critical problems. Local collaboration must improve through interest groups, planning associations and individual community meetings. The priority list should be developed in coordination with these groups.

The Kansas Water Authority appointed a Reservoir Advisory Committee (RAC) in July 2013. The RAC will review issues associated with the infrastructure of reservoirs and make recommendations on policy changes, funding and revenue options.

The KWP currently contains a set of recommendations related to dam and levee safety. A statewide database that includes locations, hazard class, status, age and condition that is available to all state agencies would help in coordination of limited funding. Deferred maintenance and damaged flood control structures should be inventoried and prioritized. Voluntary incentives for dam and levee maintenance for private owners should be considered and funding needs to be developed.