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Looking back through history, specific generations have become known for key achievements, traits and ideals. Stereotypes are broadly applied across the United States but what about us? What will this generation of Kansans be remembered for? It could be for putting personal politics and differences aside, rolling up our sleeves and working together to ensure future generations of Kansans have a reliable source of water to fuel our state's economy.

In October 2013, Governor Brownback issued a call to action to his Administration to develop a 50-Year Vision for the Future of Water in Kansas stating, "Water and the Kansas economy are directly linked. Water is a finite resource and without further planning and action we will no longer be able to meet our state's current needs, let alone growth."

"Water and the Kansas economy are directly linked. Water is a finite resource and without further planning and action we will no longer be able to meet our state's current needs, let along growth." – Governor Sam Brownback

The writing is on the wall and if we don't act today, our future is bleak. The Ogallala Aquifer is declining faster than it is recharging. Reservoirs, which are critical water storage structures for much of our state, are filling with sediment. At this rate, with no changes in the next 50 years, the Ogallala will be 70 percent depleted and our reservoirs will be 40 percent filled with sediment.

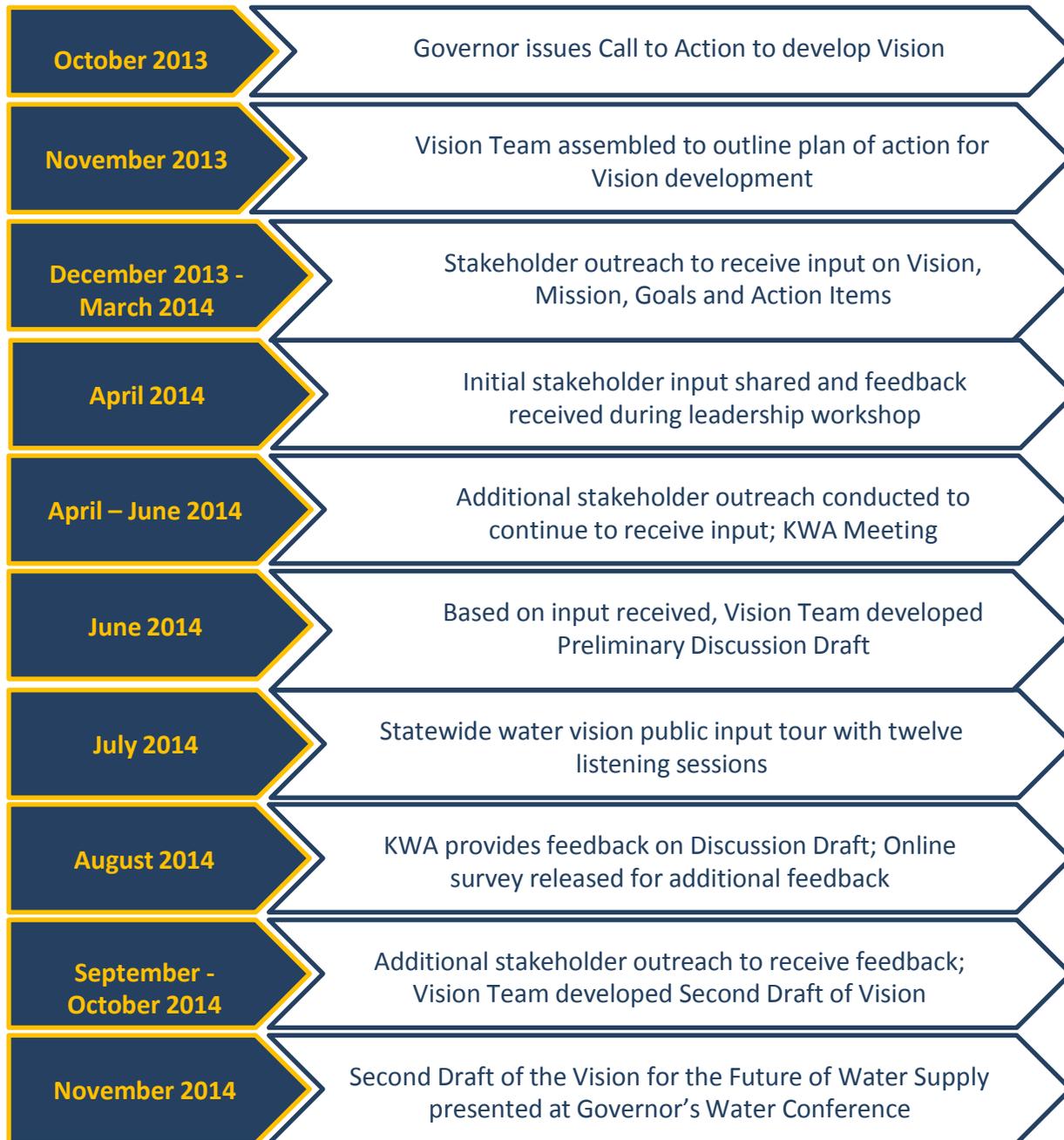
The multi-year drought has brought water issues to the forefront; we must plan for the future now.

Since issuing the call to action in October, a Vision Team comprised of the Kansas Water Office, Kansas Department of Agriculture and Kansas Water Authority, embarked on a one-year mission to seek input from water users, compile data, conduct research and chart a path forward.

Governor Brownback's Administration, and most importantly the citizens of Kansas, have responded to his call to action and have developed a Vision to ensure a reliable future water supply. If we remain united and committed to implementing the strategies defined in this Vision, future generations will look back on the work we do and say that's the generation of Kansans who worked together to protect and conserve the state's water resources today and for the future.

SUMMARY OF VISION DEVELOPMENT PROCESS

Following is a summary of the year-long process employed to develop the Vision.



Measuring progress towards meeting the Vision requires a firm understanding of the current conditions of the state's water resources. A brief overview of the current conditions of our state's water resources and a description of how water is used and managed in the state is included below. Supporting graphics and maps are provided in the Condition Atlas at the end of this document.

Kansans use approximately four million acre-feet of water annually. Statewide, irrigation is the largest water user, accounting for 80-85 percent of all water diverted in most years. Municipal use is the second largest water use category. Approximately 90 percent of all water used in Kansas is pumped from ground water sources.

Kansas water resources are ground water dominated in the western half of the state and surface water dominated in the eastern half. Climate is a significant factor in this variability, with semi-arid conditions, low precipitation and limited surface water in western Kansas. There are aquifers in eastern Kansas; however, they are generally more limited in extent and yield than the aquifers in western Kansas.

Both weather and climate exhibit a great deal of variability in Kansas. This may be the case over several days, from year-to-year and over a multi-year period. Perhaps the most striking example of this variability is the periodic recurrence of drought conditions in Kansas. Due diligence in protecting water resources and adapting to future climate variability will be important to maintaining and improving quality of life and the state's economy.

State policy regarding water management is guided by the Water Appropriation Act which asserts that water in Kansas is dedicated to the use of the people of the state, with the state charged to manage the system of water rights. As such, surface and ground water can be appropriated for beneficial use, without waste, if that does not cause impairment of an existing, more senior water right and does not unreasonably affect the public interest. A water right does not constitute ownership of such water, only the right to use it for beneficial purposes. The date of a water right, and not the type of use, determines the priority to divert and use water at any time when supply is not sufficient to satisfy all water rights. In addition, Kansas has four Native American Tribes. Each is afforded a Tribal Reserve Water Right by the federal government, which is linked to the creation of each tribal reservation. Although none of these rights have currently been quantified, the future management and use of our water resources must take into account these rights, which are likely to have the most seniority in the state.

The *Kansas Water Plan* is one of the primary tools used by the State of Kansas to address current water resource issues for future needs. The Kansas Water Office, in coordination with local, state, federal and interstate partners updates the Kansas Water Plan every 5-years. Water resource issues addressed in the Kansas Water Plan extend beyond water supply and include goals and priorities such as improving our state's water quality and improving recreational opportunities available to our citizens. The Kansas Water Plan will serve as the implementation plan for the Vision, providing 5-year milestone events to measure success towards achieving the Vision.

HIGH PLAINS AQUIFER

The High Plains aquifer underlies the western and south central portions of Kansas. It is one of the world's largest aquifers and underlies portions of eight states from South Dakota to Texas and New Mexico. About 27 percent of the irrigated cropland in the United States overlies the High Plains aquifer. In Kansas, the aquifer consists of the hydraulically interconnected Ogallala aquifer in the west, the shallower and geologically younger Great Bend Prairie and the Equus Beds aquifers in south central Kansas and the associated alluvial aquifers.

The Ogallala portion of the High Plains aquifer is the primary source of water in western Kansas for all uses and is heavily developed, primarily for irrigation. Most of the Ogallala-High Plains aquifer is closed to or restricted from additional development. The aquifer has been over-appropriated in many regions and, in localized areas, water quality is deteriorating. Projections of how many more years the aquifer will support a particular level of withdrawal indicates many large areas that have 50 years or less at current usage rates.

Recognizing that the High Plains aquifer is the largest, most economically important ground water source in Kansas, many programs, policies and individual management decisions have been directed towards conserving and extending the useable life of this resource. Examples of such activities include the development of Local Enhanced Management Areas (LEMAs), establishment of water banks, increased compliance and enforcement and implementation of various water conservation programs such as the Water Transition Assistance Program (WTAP) and Conservation Reserve Enhancement Program (CREP).

The Groundwater Management Act (GMD) Act, enacted in 1972, provided five locally developed GMDs the flexibility to adopt management practices based on local hydrologic conditions. The purpose of the Act was to preserve basic water law doctrine as established by the Water Appropriation Act while establishing the right and responsibility of local water users to determine their future with respect to ground water use.

RIVER-RESERVOIR SYSTEMS

Kansas has several major rivers, but few natural lakes. Many reservoirs, large and small, have been constructed to control flooding and store water for beneficial use. Major rivers in Kansas include the Arkansas, Kansas and Neosho. The state's largest river, the Missouri River, forms the northeast border and provides significant potential for addressing Kansas' future water demands. Twenty-four large reservoirs were constructed by the federal government in Kansas, the oldest being Kanopolis (1948) and the youngest three being El Dorado, Big Hill and Hillsdale (1981). The primary authorized purpose for reservoirs built by the U.S. Army Corps of Engineers (Corps) at the time of their construction was flood control. Irrigation water supply along with flood control was a primary use for those reservoirs constructed by the U.S. Bureau of Reclamation. Other authorized uses, which vary by reservoir, include municipal and industrial water supply, water quality, recreation and navigation support.

Kansas has purchased water supply storage in 14 federal reservoirs. Water from this storage is accessible via contract for municipal, industrial and irrigation use. These reservoirs are an important source of water supply in Kansas, providing water in some manner to approximately two-thirds of the citizens of the state. Nearly 60 percent of the energy produced in Kansas relies on storage in our reservoirs. The state's population growth projections indicate Kansans will be increasingly reliant on the reservoirs.

There are many challenges to managing reservoir supplies, such as: protecting the reservoirs from losing storage from sedimentation, identifying a method to pay for additional storage as well as operation and maintenance costs, increasing storage at key reservoirs to regain storage already lost to sedimentation and reducing or eliminating the Corps releases of water from Kansas River reservoirs to support navigation on the Missouri River. This is a practice of marginal benefit to the nation and detrimental to Kansas interests. Actions currently underway to secure, protect and restore reservoir water supply include watershed restoration and protection activities such as streambank stabilization, reallocation of storage and removal of sediment through dredging.

VISION STATEMENT

Vision:

Kansans act on a shared commitment to have the water resources necessary to support the state's social, economic and natural resource needs for current and future generations.

- At every point in the Vision development process, the Water Vision Team has been reminded the key to a reliable, long-term water supply is rooted in every Kansan understanding the importance of the state's water resources.
- The Vision statement calls on every Kansan, as stakeholders, to not only commit to ensuring a reliable water supply but also to act on that commitment.
- The Vision attempts to make clear water is necessary for human health and welfare as well as environmental stewardship and our economic well-being.
- The Vision is also based on the concept that water is not only important for today but also for our future as a state.

Mission:

Provide Kansans with the framework, policy and tools, developed in concert with stakeholders, to manage, secure and protect a reliable, long term statewide water supply while balancing conservation with economic growth.

Since the Vision calls on all Kansans to be committed to their water resources, the state of Kansas is called on in the mission to provide Kansans everything they need to act on that commitment.

GUIDING PRINCIPLES

Following are four guiding principles that directed the development of the Vision document. These guiding principles will continue to serve as precepts for the implementation of the action items.

1. Locally driven solutions have the highest opportunity for long term success. Therefore, the intentional focus of the action items presented in the Vision are to provide the necessary tools and support to allow for greater flexibility and management of water resources at the local level.
2. Policies and programs should not unintentionally penalize those who have already demonstrated good stewardship with the state's water resources.
3. Voluntary, incentive and market-based water conservation and land management activities are the preferred tools for ensuring a reliable statewide water supply.
4. Action is necessary now to ensure a reliable supply into the future.

IMMEDIATE PRIORITY ACTION ITEMS

During the development of the Vision, two action items rose to the top as critical activities necessary to ensure the successful implementation of all other actions in all theme areas. The following action items will be initiated immediately:

1. Improve coordination on water related issues with the state's primary water related agencies through the **creation of the Governor's Water Resources Subcabinet** at the Executive level with additional regular agency collaboration to implement joint activities.
2. Establish a Blue Ribbon Funding Task Force to develop a balanced, affordable and sustainable method to provide financing for water resource management and protection, including alternatives that utilize public and private partnerships.

NEED FOR LEADERSHIP

In order to accomplish the Vision, Mission, Goals and Strategies, leadership is necessary at every step in the process.

The best strategic plans are not likely to be successful if they are not carefully developed and effectively communicated to those with the power to implement them. Implementing the Vision will require leadership and cooperation with stakeholders across the state and the diligence to make the correct choices and wise investments in our state's water resources. Providing a reliable water supply for Kansas will be a big challenge in the years ahead, but if stakeholders work together to implement the strategies and recommendations described in the Vision, future generations of Kansans will have water for tomorrow.

KEYS TO SUCCESS

Keys to successful implementation of the Vision include:

1. Clear definition of the resource conditions and issues.
2. Agreement among the majority of stakeholders on the goals Kansas and its citizens are trying to achieve. The goal setting process in this document calls upon Kansans to meet, discuss and determine the goals for their region. The leadership of the Kansas Water Authority is critical to the development of these goals and must hold stakeholders accountable in meeting them.
3. While goals are important and the appropriate tools need to be readily available, stakeholders need to have the flexibility and freedom to meet the goals and use the tools.
4. Review and evaluate progress toward achieving the Vision in a timely manner to determine if further action is needed.
5. Leadership at the local level is the most critical. Local decision makers must listen to their constituents while at the same time balancing the future needs of their communities.

THEMES AND STRATEGIES TO ACHIEVE THE VISION

This section includes the themes, strategies and action items identified during the vision development process.

EXPLANATION OF SECTION

Following are a series of actions and strategies designed to achieve the vision, mission and regional goals.

The strategies are arranged in four themes:

- Water conservation
- Water management
- Technology and crop varieties and
- Additional sources of supply

Within each theme, three to five specific strategies are identified.

While many strategies are applicable to the whole state, some are specific to one or more distinct regions. Each action item is categorized into one of four applicable regions:

- Statewide
- Ogallala-High Plains Aquifer
- Reservoirs or
- Other Regions

For example, an action item in the Water Management theme recommending assessment of the Kansas River alluvial aquifer is unique to northeast Kansas and is therefore characterized as an “Other Regions Action Item.”

Within each strategy, action items are identified and categorized in Phases according to the priority for implementation.

- Phase I action items are the highest priority and will be initiated, but not necessarily completed, during the first year of this draft of the Vision
- Phase II action items will be initiated within five years
- Phase III action items are longer-term and may require additional research, development and stakeholder coordination before the action item can be initiated

WATER CONSERVATION

- Strategically emphasize information and education regarding the importance of water and water conservation practices
- Implement additional or enhanced water conservation policies and practices
- Reduce barriers and increase development of locally driven conservation and management plans
- Encourage conservation planning in economic development and business recruitment
- Increase adoption of watershed practices that reduce future water supply loss

WATER MANAGEMENT

- Modify reservoir operations and downstream targets to most efficiently operate reservoirs for water supply
- Improve interstate cooperation so that Kansans' water needs are met and protected
- Increase the regionalization of water supply to improve long-term water supply reliability
- Evaluate changes to the Kansas Water Appropriation Act and Rules and Regulations to promote better balance between efficient water use and economic benefit
- Evaluate and improve state agency coordination and collaboration

TECHNOLOGIES AND CROP VARIETIES

- Promote irrigation efficiency technologies
- Increase utilization of less water intensive crop varieties
- Implement research-based technology aimed at better understanding our state's water supply
- Develop career and technical education programming related to water resource management and technology to build the needed workforce

ADDITIONAL SOURCES OF SUPPLY

- Restore water supply lost to sedimentation through dredging and other in-lake sediment management techniques
- Allow for the transfer of water supplies between basins where feasible and cost effective
- Evaluate the sources and potential uses of lower quality water
- Secure all available storage at federal reservoirs including reallocating storage where such actions are possible
- Increase other sources of available storage for water supply