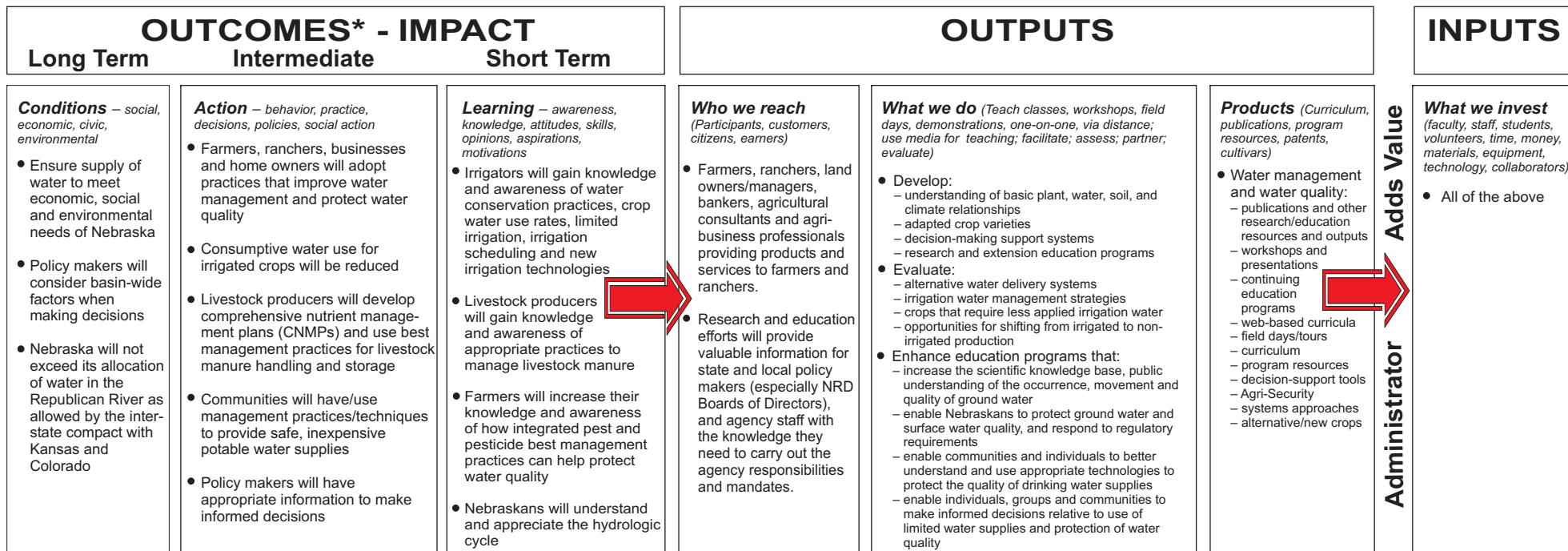


SITUATION

- Nebraskans expect continued improved natural resource management. With more than eight million acres of irrigated land in Nebraska, irrigation management education will play a critical role in conserving limited water supplies and protecting water quality.
- A sustained drought, increased competition for finite water resources, depletion of ground water aquifers, reallocations of surface water supplies through interstate water compacts and implementation of new Nebraska legislative bill (LB 962) threaten profitable agricultural production in Nebraska and endanger rural communities' economic stability.
- Recreational and environmental interests are questioning the water management policies resulting from these factors. Farmers, ranchers, Natural Resources District personnel, resource managers, policy makers and agricultural lenders are uncertain about the viability of water management policies, the long-term consequences of resource use alternatives and the optimal mechanisms and management strategies to achieve outcomes envisioned by planning processes. All these stakeholders need research-based scientific information and decision-support systems to make effective decisions and manage limited water supplies most efficiently and profitably.
- To provide appropriate and scientifically accurate information to all stakeholders, scientists must measure components of the water balance in existing cropping systems and new cropping systems that may provide economic sustainability and water conservation. They must then integrate the resulting data into effective strategies to manage existing water resources, quantify management tradeoffs and formulate effective water conservation practices. Ultimately, success requires that scientists take research results and transform and deliver them to stakeholders and policy makers in understandable and useable formats.



* Outcome statements include indicators

ASSUMPTIONS (Points for consideration)

- Water and other natural resources are critical to Nebraska's well-being
- New policies and regulations will require producers to make changes in their water management and other production practices
- University of Nebraska–Lincoln has faculty resources to address research and extension program needs related to environmental protection and natural resource management
- Producers and policy makers will need improved water management tools and basic knowledge to address Nebraska's critical water issues
- Producers will adopt new practices if those practices demonstrate effectiveness and positive economic impact

ENVIRONMENT (External Factors)

- Natural disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government regulations
- Competing public priorities

EVALUATION

Focus - Collect Data - Analyze and Interpret - Report