

**Section 7 of 22 (7q - Benefits of Irrigation Water Management)**

<p><b><u>Water resource:</u></b></p> <ul style="list-style-type: none"><li>• Conserves surface and ground water supplies</li><li>• Protects surface and ground water quality</li><li>• Substantial reduction in irrigation labor costs</li><li>• Significant increase in irrigation application efficiencies (higher yields)</li><li>• Reduced pumping costs</li><li>• Potential detrimental effects of water quality (pH, salinity &amp; sodium) on plants and soils are properly assessed and managed for</li><li>• Irrigation water losses through evaporation, runoff and deep percolation are minimized</li></ul> <p><b><u>Soil resource:</u></b></p> <ul style="list-style-type: none"><li>• Improved soil quality is possible because of increased biomass production (more crop residues are produced)</li></ul>	<ul style="list-style-type: none"><li>• Reduced soil erosion from both water and wind</li><li>• Proper assessment, management and prevention of Saline, Saline-Sodic and Sodic soils is attained</li><li>• Reduced use of soil amendments</li><li>• Reduction in water-logged soils</li><li>• Reduced leaching results in higher nitrogen-use efficiency</li></ul> <p><b><u>Plant resource:</u></b></p> <ul style="list-style-type: none"><li>• Cost for crop production is reduced due to integration of IWM with nutrient management practices</li><li>• Significant increases in yield and crop quality</li><li>• Reduced incidences of diseases and pests</li><li>• Available water quantity and quality meet the specific requirements of the crop (consumptive use, leaching)</li></ul>	<p><b><u>Other:</u></b></p> <ul style="list-style-type: none"><li>• Increased beneficial use of fertilizer and soil amendment inputs</li><li>• Reduction in over all on-farm energy use</li><li>• Protects the environment by the planned judicious use of water, fertilizers and other inputs</li><li>• Record keeping is used as an invaluable planning tool in the decision and management of current and future water resources</li><li>• All the major aspects involved in the farm operation are integrated in this IWM Field Manual</li><li>• Analysis of soil, plant/petiole tissue and water samples allows the producer to make informed decisions on all inputs and their relationship to IWM principles</li><li>• An effective IWM Plan should be updated to reflect mgmt. changes, learning, etc.</li></ul>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------