There are a number of subdivision developments in Lancaster County that utilize shared infrastructure systems. These systems are typically for sewer collection and treatment within the development and provide no connections or services to outside development or communities.

Three Sanitary Improvement Districts provide sanitary sewer to local residents: Cheney (lagoon), Holland (lagoon), Emerald (lagoon).

These larger point-source and community systems (towns, subdivision systems and SIDs) are reviewed and approved by the Nebraska Department of Environmental Quality.

Watershed Management

As discussed in the Environmental Resources Element, Lancaster County is primarily within the Salt Creek watershed. When it rains in Lincoln, stormwater flows into drainage inlets, gutters, and underground pipes before reaching Salt Creek, which drains into the Platte River. Rain that falls on hard surfaces like rooftops, parking lots and other surfaces can carry pollutants into our streams and lakes. Lincoln occasionally gets more rain than the storm drain system or streams can adequately convey, which can lead to flooding.

Floodplain and Stormwater Management

Local floodplain and stormwater management responsibility is shared by the City of Lincoln, which assumes care of the tributaries and storm drain system, and the Lower Platte South Natural Resources District (LPSNRD), which maintains the main stream channels. Both the City of Lincoln and Lancaster County participate in the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA).

Water quality from stormwater is managed under the Federal Clean Water Act. The National Pollutant Discharge Elimination System (NPDES) program addresses non-agricultural sources of stormwater discharge. This program is administered in the State by the Nebraska Department of Environment and Energy (NDEE). The City of Lincoln in coordination with the LPSNRD developed a Clean Water Program to identify the actions needed to improve the quality of stormwater runoff from developed (post-construction) areas to meet, at minimum, state standards.

Comprehensive Watershed Management

The City of Lincoln Watershed Management program combines previously separate floodplain and stormwater management initiatives. This approach recognizes that floodplains, tributaries, and upland areas are all part of a comprehensive, integrated watershed system. A comprehensive approach to watershed planning is crucial as development expands into new basins around the Lincoln city limits and as redevelopment occurs within the existing urban area. A comprehensive watershed management program needs to incorporate a range of strategies including land use planning, conservation design for new subdivisions, conservation efforts, appropriate standards for floodplains and stormwater, flood warning system development/expansion, stream stabilization, stormwater storage basins, and other structural flood control efforts.

As part of the overall watershed management program, the City, in cooperation with the LPSNRD, has developed a unified master watershed management plan. This plan is a compendium of previously approved Watershed Master Plan Studies and is to be used as a planning tool to be referenced in conjunction with proposed developments and as a guide in the preparation of future capital improvement projects. The Comprehensive Watershed Master Plan evaluates and proposes projects to address a wide range of water resources, and is formulated in cooperation with other local, state and federal agencies.

Watershed planning and the performance and adequacy of stormwater storage basins and other measures to prevent increases in peak flows will require continued assessment with the growth of the City. Upstream detention facilities are critical to preventing localized downstream flooding, further increases to the floodplain, and if properly designed also help to reduce pollutant loads to downstream waterbodies. Development and significant redevelopment projects need to meet stormwater quality requirements through the use of Stormwater Quality Best Management Practices facilities. Requirements can be accomplished through the use of detention facilities that are developed in a manner that incorporates water quality best management practices and causes minimal adverse impact to existing residential, agricultural and other land uses.

Basin management plans are a more recent watershed planning initiative that is part of the ongoing effort to proactively forecast, evaluate and manage stormwater quality impacts associated with existing and future development and redevelopment of the City. These plans provide available information on the source of contaminants and how such contaminants can be reduced through projects and programs. They also include information for the education of the public on water quality and include projects to protect and restore stream channels. The first of these basin management plans (Antelope Creek from Holmes Lake to Salt Creek) provides a framework upon which future plans may be built.

Floodplain Management

The overriding policy for the floodplain is a “No Adverse Impact” policy for the City and County, which means that the community has a goal of insuring that the action of one property owner does not adversely impact the flooding risk for other properties. The majority of the strategies below relate back to and support this umbrella concept.

The No Adverse Impact concept is supported by the Map 1.3: Growth Tiers with Priority Areas which designates the majority of floodplain areas outside of the existing urban area as Green Space, Environmental Resources, and Agricultural Stream Corridors. This supports the opportunity to reduce the risk of flood damage to life and property and to preserve the important functions of floodplains. This concept is more explicitly supported by the Salt Creek Flood Storage Area Standards and the Flood Regulations for New Growth Areas which protect flood storage in the areas with greatest risk for impacts. While regulations to support the No Adverse Impact concept have not been fully adopted throughout the Existing Urban Area or in the County’s jurisdiction, goals and strategies in this plan support minimizing impacts to the floodplain in all circumstances.

Plan Update Process

The Federal Highway Administration (FHWA) requires that communities maintain a fiscally constrained Long Range Transportation Plan (LRTP) that is updated every 5 years and embodies at least a 20-year planning horizon in order to receive federal transportation funds. The Lincoln MPO's 2050 LRTP is a companion to the Transportation chapter in the 2050 Comprehensive Plan. By the year 2025, the community will need to begin the process to update the LRTP, and the Comprehensive Plan to meet federal requirements. The update process currently assumes that the Comprehensive Plan undergoes a major update every ten years with a minor update at five years.