Environment

Environmental characteristics can significantly influence the development and redevelopment of Oldham County and can be described as physical and social in character. The physical characteristics are composed of naturally-occurring features that present unique and interesting development and conservation opportunities. The social characteristics are composed of features that affect the county's visual and perceptual quality of life. Future development and redevelopment in Oldham County should provide a balance between the physical and social environments and the demands that inevitable growth places on the county's environment.

This chapter outlines Oldham County's physical and social environments separately. Recognition must be given to the fact that many of these tangible social characteristics are a direct product of the manner in which the physical environment is treated. Therefore, the outline of the county's physical environmental characteristics often times overlaps into the less tangible social characteristics.

Physical Environment

The physical environment is composed of naturally occurring features (i.e. soils, watersheds and topography) found throughout Oldham County. These naturally occurring features can be outlined separately, however they are interrelated and should be considered cumulatively in addressing the physical environment. The identification of potential physical constraints can assist in outlining general guidelines that lessen the impacts development creates on the physical environment. Addressing the physical environment through thoughtful design and sound planning principles can significantly contribute to the creation of a well-balanced social environment.

Soils

One of Oldham County's most important natural resources is land. A primary component of the land's suitability for wildlife, agricultural, residential, or non-residential uses is the soil. The characteristics of the soil greatly influence the economic and ecological suitability of different land uses. The soils in Oldham County have been classified and mapped by the United States Soil Conservation Service (SCS). The Soil Conservation Service has published a book, *Soil Survey of Oldham County*, which details the natural characteristics of the numerous types of soils in the county. *Soil Survey of Oldham County* is an initial assessment tool that can be used to determine what type of studies may be necessary prior to the review

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

and approval of a development. When used with an on-site evaluation, this survey is an invaluable tool in determining the impact that soil type may have on the development and redevelopment of Oldham County. The soil's suitability for supporting development has a potentially tremendous economic impact on public and private fiscal situations.

The most significant consideration in evaluation of a soil's characteristics for development is its ability to support the necessary service infrastructure and building improvements. Service infrastructure and building improvements affected by soil type are roads, sanitary sewers, utility transmission lines, foundations, and basements. They are affected by the soil's erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, shear strength, compressibility, slope stability, and similar factors. The soil's characteristics should be completely evaluated and strongly considered in the planning and engineering of these improvements. A majority of the residential and nonresidential uses in Oldham County rely upon on-site sewage disposal systems. These on-site systems include septic tank absorption fields, septic lagoons and wetlands, septic spray systems and septic holding tanks.

	Percent of Total Land Area
Soil Types with Slight Limitations	
Crider Silt Loam, 0 to 2 Percent Slope	0.3
Crider Silt Loam, 2 to 6 Percent Slope	14.2
Elk Silt Loam, 2 to 6 Percent Slope	0.5
Wheeling Silt Loam, 0 to 2 Percent Slope	0.2
Wheeling Silt Loam, 2 to 6 Percent Slope	0.6
TOTAL	15.8
Soil Types with Moderate Limitations	
Crider Silt Loam, 6 to 12 Percent Slope	5.5
Hagerstown Silt Loam, 2 to 6 Percent Slope	0.3
Hagerstown Silt Loam, 6 to 12 Percent Slope	3.0
Hagerstown Silty Clay Loam, 6 to 10 Percent Slope	0.3
Wheeling Silt Loam, 6 to 12 Percent Slope	0.3

Table 4.1 Oldham County Soil Type Limitations for Septic Tank Absorption Fields

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

SECTION 7 – ENVIRONMENT, UTILITIES, AND STORMWATE	ER
---	----

	Percent of Total Land Area
TOTAL	9.4
Soil Types with Severe Limitations	
Beasley Silt Loam, 2 to 6 Percent Slope	1.9
Beasley Silt Loam, 6 to 12 Percent Slope	14.4
Beasley Silt Loam, 12 to 20 Percent Slope	1.6
Beasley Silty Clay Loam, Silt Loam, 6 to 12 Percent Slope	4.6
Beasley Silty Clay Loam, Silt Loam, 12 to 20 Percent Slope	3.2
Beasley-Caneyville Rocky Silt Loam, 30 to 60 Percent Slope	4.3
Boonesboro Silt Loam	0.7
Brassfield-Beasley Silt Loam, 20 to 30 Percent Slope	3.5
Caneyville Silt Loam, 6 to 12 Percent Slope	0.2
Caneyville-Beasley Rocky Silt Loam, 12 to 30 Percent Slope	4.3
Cynthiana-Faywood-Beasley Complex, 30 to 60 Percent Slope	6.2
Faywood Silt Loam, 6 to 12 Percent Slope	0.2
Faywood Silt Loam, 12 to 30 Percent Slope	0.5
Faywood SIlty Clay Loam, 12 to 30 Percent Slope	1.0
Huntington Silt Loam	0.7
Lawrence Silt Loam	0.9
Lindside Silt Loam	1.7
Lowell Silt Loam, 2 to 6 Percent Slope	2.1
Lowell Silt Loam, 6 to 12 Percent Slope	3.4
Lowell Silty Clay Loam, 6 to 12 Percent Slope	0.4
Newark Silt Loam	0.6
Nicholson Silt Loam, 2 to 6 Percent Slope	11.6
Nicholson Silt Loam, 6 to 12 Percent Slope	1.5
Nolin Silt Loam	2.3

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

· · · ·	
	Percent of Total Land Area
Otwell Silt Loam, 2 to 6 Percent Slope	0.9
Pits	0.2
Weinbach Silt Loam	0.5
Wheeling Soils, 12 to 30 Percent Slope	0.3
Woolper Silty Clay Loam, 2 to 6 Percent Slope	0.2
Woolper Silty Clay Loam, 6 to 12 Percent Slope	0.2
Water	0.2
TOTAL	74.8

Source: United States Department of Agriculture, Soil Conservation Service

1977 Soil Survey of Oldham County, Kentucky

The conventional drainage lateral field is the most widely utilized on-site sewage disposal system in Oldham County. The feasibility of a septic tank absorption field is dependent upon the soil's permeability, depth to seasonal high-water table, depth to bedrock or fragipan, degree of slope, and susceptibility to flooding. Approximately 75 percent of the land area in Oldham County is comprised of soils that have severe limitations in adequately supporting septic tank absorption fields.

Areas where sewers are not available and soil is inadequate for supporting septic tank absorption fields create a limiting effect on development opportunities. When development is proposed in areas with soil limitations, guidelines that address those limitations should be considered. Implementation strategies to help overcome the soil limitations for septic tank absorption fields may include:

1. Encourage alternative on-site sewage disposal systems.

- Shared or multi-lot absorption fields should be encouraged when practical. These fields take advantage of a small, localized occurrence of soil type that is conducive to septic tank absorption fields.
- Alternative sewage disposal systems would include on-site and offsite systems, septic lagoons, septic spray systems, septic holding tanks and sewage treatment plants.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

2. Continue the development of county-wide wastewater treatment plants.

 MSD and La Grange Utilities currently oversee the creation, operation and maintenance of regional sewage treatment plants within Oldham County.

These implementation strategies should be encouraged only where approved by the Oldham County Health Department. They intend to reduce the long-term economic and ecological cost of development in Oldham County.

Topography

Another significant component of the land's suitability for supporting Oldham County's development is topography. Oldham County's topographic characteristics vary greatly. The primary topographic characteristic that determines the economic and ecological suitability of development is the degree of slope. Degree of slope should be considered when reviewing proposed developments.



Figure 4.1 Oldham County Slopes Greater than 30 Percent



Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

The degree of slope is a significant consideration in making decisions concerning appropriate land use for an area. Additionally, the design and engineering of service infrastructure and building improvements are greatly impacted by the degree of slope. Poor development design in areas with steep slopes and hillsides can potentially create a tremendous negative impact.

Karst is a special type of landscape that is technically defined by the U.S. Geological Society as "a terrain, generally underlain by limestone or dolomite, in which the topography is chiefly formed by dissolving of rock and which may be characterized by sinkholes, sinking streams, closed depressions, subterranean drainage and caves." Kentucky is famous for the prevalence of karst landscape and known internationally as the home of Mammoth Cave, the world's largest cave system, and the International Center for Cave and Karst Studies at Western Kentucky University.



Figure 4.2 Karst Potential Areas in Kentucky

Source: Kentucky Geological Survey

Map Disclaimer: This map is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Although not as high as some other Kentucky counties, Oldham County does have the potential for karst features and the potential risks associated with them. These risks include but are not limited to structural damage caused by building too close to an unstable feature, flood damage (flooding around karst features do not show up on FEMA flood maps) and groundwater contamination.

Implementation strategies that address development design for areas with steep slopes, hillsides and karst features may include:

1. Follow the natural topography.

- The road network and utility service lines should follow the natural topography to minimize the disturbance to slopes, hillsides and karst features.
- Encourage the placement of the service infrastructure to minimize unnecessary cutting, filling and grading. The minimization of earthwork reduces the economic cost of development and the impact on the physical environment. Additional public economic benefits are realized by lessened expenditures for maintenance of the infrastructure.

2. Retain the natural topographic features.

 Natural topographic features such as slopes, drainage swales, streams, and rock outcroppings should be retained where possible. The retention of these natural topographic features reduces the economic costs of development and the impact on the physical environment. The terracing of steep slopes and hillsides and capping of sinkholes should be strongly discouraged due to the severe impact on the physical environment and potential future economic implications associated with erosion and slippage.

3. Cluster the development sites.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

- The clustering of development sites should be encouraged as an alternative to the typical practices of development. Clustering development sites reduces the economic cost of development and the impact on the physical environment.
- Public economic benefits are realized by lessened expenditures for the maintenance of the service infrastructure.
- The benefits of clustering can be fully realized by the formulation of detailed and effective arrangements that address the preservation, maintenance, and control of open and recreational space created through clustering.

The enactment of the above and similar implementation strategies should be encouraged. Topographic characteristics should be completely evaluated and strongly considered in the planning and engineering of service infrastructure and building improvements.

Flood Prone Areas

Another significant component of the land's suitability for supporting development in Oldham County is flood probability. The probability of an area experiencing significant flooding is primarily a function of its location and topography. The probability of extensive flooding primarily occurs in areas adjacent to the Ohio River and major internal creeks. Significant flooding has a potentially tremendous economic impact on public and private fiscal situations.

The flood prone areas in Oldham County have been classified and mapped by the Federal Emergency Management Agency (FEMA). The Federal Emergency Management Agency has published a book, *Flood Insurance Study of Oldham County* that details the probability of extensive flooding in the county. The Flood Insurance Study includes a series of maps that identify areas that could experience significant flooding. The Flood Insurance Study is an invaluable tool for identifying these areas.

Table 4.2 Oldham County Flood Prone Areas

Severe Flood Potential					
Ohio River					
Moderate Flood Potential					
Ash Run	Ashers Run				

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

SECTION 7 – ENVIRONMENT, UTILIT	IES, AND STORMWATER
Brush Creek	Caney Fork
Cedar Creek	Currys Fork
Darby Creek	East Fork Floyds Fork
Eighteen Mile Creek	Floyds Fork
Garret Branch	Harrods Creek
Hite Creek	North Fork Cedar Creek
North Fork Currys Fork	North Fork Floyds Fork
Organ Creek	Pattons Creek
Pond Creek	Sinking Fork
South Fork Currys Fork	South Fork Darby Creek
South Fork Harrods Creek	Sycamore Run

Source: Federal Emergency Management Agency

2006 Flood Insurance Study of Oldham County, Kentucky

The identified area of extensive flooding is referred to as the 1% (a.k.a one hundred (100) year flood hazard area (flood plain). Development in flood hazard areas can potentially create a tremendous negative impact on public and private fiscal situations. When development is proposed in these areas guidelines that address the potential flood hazard should be considered.



Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------





Figure 4.3 Oldham County Flood Hazard Areas

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------



Source: Federal Emergency Management Agency

Map Disclaimer: This map is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Implementation strategies that address the flood hazard are listed below:

1. Regulate development in the floodplain.

• Permit development in the floodplain only when it can be demonstrated that stormwater capacity will not be adversely affected or that compensatory storage is provided outside the existing floodplain.

2. Discourage the importation of fill material.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

• The placement of additional fill material in the floodplain should be discouraged. The importation of fill reduces the floodplain's water carrying capacity and increases the heights and velocities of floodwaters. The importation of fill not only increases the flood hazard of the immediate area but also of the watershed.

3. Construct livable areas above the determined flood elevation.

- When development occurs in the floodplain, all construction should be placed above or outside of the determined flood elevation. Development is likely to occur in floodplain areas due to the positive aspects of proximity to waterways.
- When structures are constructed in the floodplain, all livable areas should be placed 2,418 inches above the determined flood elevation in order to minimize economic loss in the event of a flood. Additionally, the construction of fences, berms, walls, or any other impediment to the floodwaters should be discouraged unless approved by The Kentucky Division of Water.

4. Cluster the development sites.

- The clustering of developmental sites along the periphery of the floodplain should be encouraged as an alternative to the typical practices of development.
- Examples of these types of development are open space or conservation developments.
- Clustering buildings and built surfaces significantly decreases the flood hazard and allows developments to enjoy the positive aspects of proximity to waterways.
- The benefits of clustering can be fully realized by the formulation of detailed and effective arrangements that address the preservation, maintenance, and control of open and recreational space created through clustering.

These implementation strategies should be encouraged only where approved by The Kentucky Division of Water. Development in flood prone areas should seek to balance the economic gain from development against the resulting increase in flood hazard.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Wetlands

Wetlands function as a primary recharge/discharge area for groundwater, as a retention area for stormwater flow, and as a valuable wildlife habitat. The viability of wetlands can impact public and private economic situations due to degradations in the level and quality of groundwater, and the potential for flooding.



Wetlands in Oldham County may be identified by utilizing the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* published by the United States Army Corps of Engineers. The criteria used to identify wetlands are the presence of hydrophytic plants, hydric soils, and wetland hydrologic patterns. The criteria outlined in the federal manual are effective tools to designate wetlands in Oldham County. When development is proposed in areas that contain designated wetlands, federal law requires the developer must first try and avoid impact to a wetland, then minimize it, and as a last resort, compensate for wetland damage through mitigation. Implementation strategies that address the negative impacts on wetlands are listed below:

1. Discourage dredging and filling.

• The dredging and filling of wetlands eliminate the wetland's functioning as a recharge/discharge area for groundwater, a stormwater retention area, and a wildlife habitat. Additionally, the potential long-term economic costs for the maintenance of service infrastructure and building improvements may be substantially increased in dredged or filled wetlands.

2. Minimize changes in the natural water flow.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

- This is particularly applicable during the construction of the service infrastructure and building improvements. Grading and denuding of land within the wetland's watershed should be kept at a minimum, and effective erosion control measures should be fully utilized. Increased sediment flow and siltation associated with graded land diminishes the long-term viability of the wetland.
- The natural drainage patterns of the wetlands should not be substantially altered. The long-term ecological viability of the wetlands should be addressed to minimize the negative impacts of development on wetlands.

3. Cluster the development sites.

• Clustering developments significantly decrease the negative impact on wetlands and allows those developments to enjoy the aesthetics of proximity to wetlands.

The enactment of the above and similar general implementation strategies should be encouraged. Development in areas containing wetlands should seek to minimize the development's impact on the viability of the wetlands.

Wildlife Habitat



A bald eagle rests in a tree over Curry's Fork Bridge. (Photo by Jamie Costanzo and published in the Oldham Era on December 11, 2024.)

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

A less tangible component of the land's suitability for supporting Oldham County's development is the impact on wildlife habitats. Future development is inevitable and is anticipated to exert further pressures on the viability of wildlife habitats.

The ecological viability of wildlife habitats has been significantly altered due to development pressures. When development is proposed in areas that support wildlife habitats, guidelines that minimize the negative impacts should be observed. Implementation strategies that minimize the negative impacts on wildlife habitats are listed below:

1. Retain the natural features.

- Natural features such as mature stands of trees, steep slopes, drainage swales, and streams should be retained to the greatest extent possible in wildlife areas.
- Extensive grading and denuding of the land should be discouraged.
- Retention of natural features minimizes the impact of development on wildlife habitats.

2. Discourage perimeter fencing along waterways.

- Perimeter fencing should be discouraged in areas adjacent to waterways.
- Perimeter fencing poses a serious impediment to the viability of waterway areas as a wildlife habitat and migratory route.

3. Clustering the development sites.

• The clustering of development sites in wildlife areas significantly minimizes the impact of development on wildlife habitats and allows developments to enjoy the positive aspects of proximity to wildlife.

The enactment of the above and similar general implementation strategies should be encouraged. Development in wildlife habitat areas should seek to minimize the development's impact on the viability of the wildlife habitat.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Wastewater Treatment

Two entities provide wastewater treatment services to the residents of Oldham County: La Grange Utility Commission and Metropolitan Sewer District (MSD).

La Grange Utility Commission



The La Grange Utility Commission (LUC) provides water and wastewater services to approximately 4,000 customers within and adjacent to the LaGrange city limits. LUC operates one wastewater treatment facility (located on New Moody Lane) with a capacity of 1.9 million gallons per day, the plant capacity was increased in 2013. LUC also acquired the Lakewood Valley Treatment plant with construction underway to eliminate the plant in 2025. LUC is currently updating the 201 Facilities Plan with the DOW and working to implement an additional WWTP by 2029 with a designed capacity of .9 MGD to serve the growth.

Metropolitan Sewer District



The Metropolitan Sewer District (MSD) has provided wastewater services to residents in the Crestwood area prior to 2019 and in 2020 acquired the wastewater facilities formerly operated by Oldham County Environmental Authority (OCEA). As such, MSD now operates

all sanitary sewer facilities within Oldham County with the exception of those operated by La Grange Utilities Commission and a few private systems (e.g. Paramont Estates). MSD's service area in Oldham County outside Crestwood equates to approximately 6,000 residential customers.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Stormwater Management

Congress passed the Clean Water Act in 1972. Enforcement of the Clean Water Act and the subsequent amendments is the responsibility of the US Environmental Protection Agency (EPA) at the national level and the Kentucky the Division of Water at the state level. Initial enforcement, called "Phase I", was limited to urban areas with populations of 100,000 or more. Nearly every urban community in the nation has some form of Stormwater Management.

The Municipal Separate Storm Sewer System (MS4) permit program is the result of the 1987 amendments to the Clean Water Act (CWA), commonly referred to as the Water Quality Act of 1987. In these amendments, Congress mandated the Environmental Protection Agency (EPA) address non-point source pollution in stormwater runoff. EPA was then required to develop a program to permit the discharge of the stormwater from the MS4, from specific industrial activities that it considered to be significant sources of pollution, and from construction site runoff. Oldham County reestablished the Storm Water District (SWD) by resolution in 2016 with current co-permittees as follows

- City of Crestwood
- City of LaGrange
- City of Orchard Grass Hills
- City of River Bluff

Note: The City of Pewee Valley was not a co-permittee within that original resolution and The City of Goshen exited in 2020. Both maintain a separate MS4 permit with the KY Division of of Water.

Responsibilities of the SWD Board include the following:

- Provide for the implementation of the EPA NPDES permit for the improvement of water quality through the MS4 Phase II program.
- Prevent and correct the pollution of streams.
- Provide for the general public health, safety, and welfare.
- Construct storm water facilities conducive to the public health, safety, comfort, convenience, and welfare.
- Implement the provisions of and carry out...the administration and funding of storm water management and the mitigation of surface water pollution.
- Provide for the collection and disposal of storm water; treat and dispose; build, maintain, operate and repair storm water improvements and related facilities.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

As a Phase II community, Oldham County was required to apply for a 5-year permit under the National Pollutant Discharge Elimination System (NPDES) requirements. The focus of these requirements is Oldham County's Municipal Separate Storm Sewer System.

Oldham County currently operates within the requirements of the recurring 5-year KY Division of Water permit (2023-2028) with a focus on the following prescribed minimum control measures:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Controls
- Good Housekeeping / Pollution Prevention

Oldham County Fiscal Court implements and enforces the MCMs by ordinances established to regulate construction site runoff and post-construction (i.e. new development) stormwater runoff including stormwater detention or retention and water quality requirements.

The Stormwater District Board has also initiated and completed mid to large scale capital improvement projects to address stormwater runoff concerns in areas developed prior to the implementation of current ordinances. Projects include but are not limited to Goshen Hills Phases 1 and 2 Drainage Improvements Projects (completed), Buckner Soccer Complex Detention Basin (completed), and Confederate Estates, Ashbrooke, and Clovercroft Drainage Improvements Project (in-design).

Through its Road Department Crews and small contracts, OCFC also maintains stormwater conveyances within public right-of-way and dedicated drainage easements. OCFC also provides assistance to residential property owners with drainage concerns on their property by providing preliminary inspections, reports of findings, and recommendations to address the concerns. Some of these recommendations may be eligible for cost-share assistance by the County established by ordinance.

OCFC is also currently engaged in a federally funded 319(h) grant to address issues within the Currys Fork watershed, an impaired watershed identified in the watershed plan (dated 2012, revised 2018). OCFC has partnered with the Oldham County Soil & Water Conservation District (OCSWCD) to manage and implement the Federal Fiscal Year (FFY) 2022 grant and OCSWCD has been awarded and FFY2024 grant to continue progress. Educational resources and means of improvement (e.g. nature-based solutions) established are shared throughout the county.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Water Treatment

Water is an important part of everyone's life. Not only is its consumption a necessity for all people to continue living, but it is also used for cleaning, fire protection, recreation, etc. The availability of potable water is an important and often overlooked amenity in society.

Oldham County households receive their drinking water from one of four providers: La Grange Utilities Commission, Louisville Water Company, Henry County Water District #2 or the Oldham County Water District. It is estimated that as much as 5 percent of Oldham County residents still rely on private domestic water supplies (wells, cisterns, etc.).

Figure 5.4 Oldham County Water Provider Service Areas

Future Land	Population	Schools	Economic Development	Community Facilities	Transportation	ENVIRONMENT, UTILITIES, AND	Tourism	Solid Waste
Use			Development	and Services		STORMWATER		vvaste



Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

Louisville Water



Figure 5.5 Louisville Water Company Oldham County Unserved Roadways



Source: Louisville Water Company

Unserved Roads:

• Hwy 1694: Recently completed 6,500' of 8" main that brought water and fire protection service to seven previously unserved customers. This project was 100% funded by the Kentucky Infrastructure Authority.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

• Huckleberry Ln. and Oaks Way: Installation of ~1,000' of main along Huckleberry Lane and Oaks way to bring water and fire protection services to eight previously unserved customers. This project was 100% funded by the Kentucky Infrastructure Authority with leftover funds from Hwy 1694 (the grant funding is county specific)

Additionally, Louisville Water maintains a list of unserved roads in our Oldham County service area and works with the Judge Executive on funding opportunities and priority rankings (see attached map).

Main Replacement and Rehabilitation Projects (MRRP):

• Cherry Ln: Replacement of approximately 7,500' of existing main Bird Rd., Cardinal Blvd., Cherry Rd., Dove Rd., and Robin Rd. through the Main Replacement and Rehabilitation Program (MRRP). This work is currently under design and scheduled for construction in 2027 but could be accelerated as the capital budget allows.

Potential MRRP projects are reviewed annually based on a Net Present Value of continuing to repair a main vs. replacing it. Most of these projects are in Jefferson County (where our oldest mains are) but we do try to make sure our service areas in Bullitt and Oldham Counties receive a fair proportion of these projects.

Other Projects:

- Moser Farm Rd. PRV: Installation of a Pressure Reducing Valve at the intersection of Moser Farm Rd, Hitt Ln. and Haunz Ln. This will act as an emergency supply to the majority of the Glen Oaks subdivision which is currently supplied by a single line along Worthington Ln. This project should be completed in early to mid-2026
- US Hwy 42 Relocation: Relocation and upsizing along US Hwy 42 in Goshen as a part of a KYTC project to widen the road. This project will help get additional supply to the North Oldham tank which is currently stressed on large irrigation demand days. Louisville Water is working with KYTC on plans and schedules. A demand study of this corridor is also being performed as a part of our 5-yr Comprehensive Facilities Plan.

Low Flow Hydrants:

• Louisville Water is aware of 13 hydrants that do not meet the current hydrant ordinance in Oldham County. A list of these hydrants is attached and are sent to the North Oldham Fire District annually. Louisville Water has identified a project to

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

bring most of these hydrants up to standard via a 4,100' grid tie along Goshen Ln. Louisville Water continues to explore funding opportunities with the Oldham County Judge Executive for this grid tie. It is also hoped that development will contribute to the grid tie.



Figure 5.6 Louisville Water Company

Source: Louisville Water Company



Oldham County Water District

The Oldham County Water District (OCWD) is the only service provider that withdraws and treats water within the county boundary. The Oldham County Water Treatment Plant withdraws water from the Ohio River and is currently designed with a treatment capacity of 13.0 million gallons per day. The average daily production is approximately 3.54 million gallons per day. After treatment the water is transported throughout the district to OCWD's

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------

7,700 customers as well as sold to the LaGrange Utilities Commission for distribution to their customers.

La Grange Utilities Commission



The LaGrange Utilities Commission (LUC) purchases water from the Oldham County Water District. LUC distributes water to 4,100 customers through its system of approximately 37 miles of water mains and elevated storage tanks.

Improvements to the system are ongoing with projects in design or under construction to rehabilitate aging areas of the distribution system and include the following projects: Fort Pickens Water Tank Rehab- a 300,000 gallon storage tank being reconditioned inside in 2025, The Courts Water Line Replacement- Updating old cast iron water main with new PVC in 2025, 1st Street Water Line Replacement- replacing aging cast iron main under CSX railroad in design and Pressure Reducing Vaults- 3 to be installed to establish continuing connection between two pressure zones.

Water service is not a development limitation since water lines usually follow development instead of preceding it. Typically, the problems that potential developments encounter are undersized water lines, inadequate water pressure rates, and flow rates that are improper for consumption and fire protection. Improvements in the county's water service should be encouraged to ensure adequate water pressure, availability and quality. The provision of water service should be routinely evaluated and improved to prevent obsolescence of the water service system.

Future Land Use	Population	Schools	Economic Development	Community Facilities and Services	Transportation	ENVIRONMENT, UTILITIES, AND STORMWATER	Tourism	Solid Waste
-----------------------	------------	---------	-------------------------	---	----------------	--	---------	----------------