

## TOWN OF MCCANDLESS STORMWATER MANAGEMENT TIMELINE

<b>1978</b>	<p>The Town embraced the management of stormwater when the concept emerged in 1978 with the passage of Pennsylvania Stormwater Management. (Act 167)</p> <ul style="list-style-type: none"> <li>▪ McCandless immediately enacted a local ordinance which applied to new development of all types: commercial, residential and institutional. Developers submitted plans that calculated runoff with grading to store stormwater.</li> </ul>
<b>1980</b>	FEMA publishes Flood Plain Regulations and Maps of Flood Plain locations
<b>1980</b>	<p>McCandless adopts original Flood Plain Ordinance</p> <ul style="list-style-type: none"> <li>▪ When FEMA established its regulations and maps (Ordinance #794)</li> </ul>
<b>06/09/1980</b>	<p>Ordinance (#794)</p> <p>AN ORDINANCE AMENDING THE CODIFIED ORDINANCES OF THE TOWN OF McCANDLESS, PART THIRTEEN, PLANNING AND ZONING CODE, AND PART SEVENTEEN, BUILDING CODE, TO INCORPORATE FLOOD PLAIN REGULATIONS FOR LAND DEVELOPMENT AND BUILDING CONSTRUCTION</p>
<b>08/24/1981</b>	<p>Flood Plain Ordinance Updated (#823)</p> <p>AN ORDINANCE AMENDING THE CODIFIED ORDINANCES OF THE TOWN OF McCANDLESS, PART THIRTEEN, PLANNING AND ZONING CODE, AND PART SEVENTEEN, BUILDING CODE, INCORPORATING AMENDED FLOOD PLAIN REGULATIONS FOR LAND DEVELOPMENT AND BUILDING CONSTRUCTION</p>
<b>Early – Mid 1980s</b>	<p>Examples of early facilities: Oakridge Development, Forest Trails, Original Forest Oaks</p> <ul style="list-style-type: none"> <li>▪ Stormwater and release it over time.</li> <li>▪ An evolutionary process of updating stormwater management techniques begins which continues today.</li> </ul>
<b>05/28/1985</b>	<p>Ordinance Updated (#906)</p> <p>AN ORDINANCE AMENDING PART THIRTEEN, THE PLANNING AND ZONING CODE, OF THE CODIFIED ORDINANCES OF THE TOWN OF McCANDLESS</p>
<b>1984-1986</b>	Allegheny County undertook pilot watershed Stormwater Management planning under Act 167. Town participated significantly in this planning process.
<b>Mid to Late 1980s</b>	More advanced stormwater facilities blended into Plans of Lots. Examples: Parkmont Estates, Park Le Grand, Knob Hill, Rustin Acres.
<b>Mid 1980s to present</b>	The Town maintains over 60 public stormwater control facilities
<b>Late 1980s – 1990s</b>	<p>Various sized facilities constructed to hold, then slowly release stormwater.</p> <ul style="list-style-type: none"> <li>▪ Some blend into backyards as in the Pine Run Plan of Lots; Rustin Acres</li> <li>▪ Commercial buffer/landscaped areas – Sperling Funeral Home or front yards like La Roche College</li> <li>▪ Town offers engineering assistance to property owners to help address Stormwater Management on their properties or among neighboring properties.</li> </ul>

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<p><b>Late 1980s to 2012</b></p>	<p>Regional facilities installed in valleys to address seasonal flooding in neighborhoods built in an era when no stormwater controls existed.</p> <ul style="list-style-type: none"> <li>▪ Wittmer Retention Dam installed in 1989 along Highland Road eliminated flooding on Wittmer Road neighborhood of nearly 50 homes and La Roche.</li> <li>▪ Stormwater control area formed onto North Allegheny School District property where Duncan Avenue West acts as a dam and controls stormwater from all School District property along Cumberland Road and large neighborhood across Cumberland built prior to stormwater regulations.</li> </ul>
<p><b>03/24/1986</b></p>	<p>Stormwater Management Ordinance Updated (#926) AN ORDINANCE AMENDING PART THIRTEEN, THE PLANNING AND ZONING CODE, OF THE CODIFIED ORDINANCES OF THE TOWN OF MCCANDLESS BY AMENDING CERTAIN FLOOD PLAIN PROVISIONS</p>
<p><b>1987</b></p>	<p>Developed a comprehensive Stormwater Management Ordinance (No. 979) with release rates in two studied watersheds (Pine Creek and Girty's Run)</p>
<p><b>1989 to present</b></p>	<p>Stormwater Control Facilities updated, some expanded: Oakridge Stormwater facility re-done and expanded for additional flood control; North Park Place combined facility with Park Ridge (Montgomery Plan).</p> <ul style="list-style-type: none"> <li>▪ Created additional 2.5 acres wetlands along McCandless Drive at Blazier Drive. Exemplary rain garden, bioretention area built into McCandless Crossing East parking area.</li> <li>▪ Forest Oaks surge ponds from early 1980s converts to full stormwater control facility.</li> </ul>
<p><b>04/22/1991</b></p>	<p>Stormwater Management Ordinance Updated (#1052) AN ORDINANCE AMENDING PART THIRTEEN, THE PLANNING AND ZONING CODE OF THE CODIFIED ORDINANCES OF THE TOWN OF MCCANDLESS, BY ADDING TO AND AMENDING VARIOUS SECTIONS OF SAID PLANNING AND ZONING CODE</p>
<p><b>12/19/1994</b></p>	<p>Ordinance Updated (#1135) AN ORDINANCE AMENDING PART THIRTEEN, THE PLANNING AND ZONING CODE OF THE CODIFIED ORDINANCES OF THE TOWN OF MCCANDLESS, BY ADDING TO AND AMENDING VARIOUS SECTIONS OF SAID PLANNING AND ZONING CODE</p>
<p><b>12/04/1995</b></p>	<p>Flood Plain Ordinance Updated (#1152) AN ORDINANCE AMENDING PART THIRTEEN, THE PLANNING AND ZONING CODE OF THE CODIFIED ORDINANCES OF THE TOWN OF MCCANDLESS, BY AMENDING A SECTION PLANNING AND ZONING CODE RELATIVE TO FLOOD PLAIN AREAS TO INCLUDE CURRENT FLOOD PLAIN MAPS</p>

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<b>03/09/1998</b>	Flood Plain Ordinance Updated (#1200) AN ORDINANCE AMENDING VARIOUS SECTIONS OF PART THIRTEEN, THE PLANNING AND ZONING CODE OF THE CODIFIED ORDINANCES OF THE TOWN OF McCANDLESS, BY ADDING TO AND AMENDING VARIOUS SECTIONS OF SAID PLANNING AND ZONING CODE; IN PARTICULAR, ARTICLE 1342, ENTITLED "FLOOD PLAIN PROVISIONS"
<b>2003</b>	(US)EPA publishes directives for water quality management
<b>2004</b>	McCandless leads a North Hills Council of Governments (NHCOG) watershed approach to Stormwater Management and water quality. NHCOG forms standing Stormwater Committee. Town Manager integral to process on ongoing basis.
<b>2005</b>	Comprehensive update of Stormwater Ordinance (No. 1318) made. Employs water quality measures in addition to stormwater control in accordance with EPA directives and PADEP guidelines.
<b>2005-present</b>	Facilities installed in new developments incorporate a variety of Stormwater Management and water quality Best Management Practices (BMPs) for stormwater infiltration such as bioretention, rain gardens, even rain chains. Examples: Walgreen's, Sister Theresa Novak Administration Building (Vincentian Collaborative Services), Chuck's Auto Body.  Facilities: <ul style="list-style-type: none"> <li>▪ Provide Sedimentation control</li> <li>▪ Control Water Closer to Source</li> <li>▪ Reduce Velocity</li> <li>▪ Keep the site as close to nature as possible</li> <li>▪ Create Cool Water</li> <li>▪ Use indigenous plants</li> </ul>
<b>2008</b>	McCandless adjusts its Stormwater Management Ordinance (No. 1363) to align with NHCOG communities PADEP template.
<b>2012</b>	Demonstration rain garden built below Lorraine Rogers Soccer Fields parking area adjacent to Town Hall
<b>2014</b>	Exemplary rain garden, bioretention area built into McCandless Crossing East parking area.
<b>08/25/2014</b>	Ordinance Updated (#1440) AN ORDINANCE REPLACING THE TOWN'S FLOOD PLAIN ORDINANCE IN ACCORDANCE WITH REQUIREMENTS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY AND THE COMMONWEALTH OF PENNSYLVANIA
<b>9/11/2015</b>	Plans approved by PennDOT for Pine Creek/Rt. 19 Partnership Project that includes rain garden and swale system, minimizing pipe conveyance.
<b>Planned for 2016</b>	A second functional and educational rain garden will control and filter stormwater at the new Town museum.