

Drafted By:	Deputy City Clerk
Referred By:	Environmental Advisory Council
Introduced On:	March 13, 2017
Advertised On:	June 6, 13 and 22

BILL NO. 59 -2017
AN ORDINANCE

AMENDING THE CITY OF READING CODE OF ORDINANCES CHAPTER 600 ZONING, BY ADOPTING A NEW SECTION §600-819 PROVIDING FOR A STEEP SLOPE OVERLAY DISTRICT AND AMENDING §600-2202 DEFINITIONS AND ADDING A REFERENCE TO THESE REGULATIONS IN THE CODE OF ORDINANCES CHAPTER 521 SUSTAINABILITY

WHEREAS, Steep slope development or redevelopment is a complex issue that can negatively affect the personal safety and property of individuals, as well as the environment; and

WHEREAS, the PA Municipalities Planning Code, Section 605 states that municipalities that have enacted a Zoning Ordinance may, among other things, regulate, restrict, or prohibit uses and structures at places of relatively steep slope or grade and other areas of hazardous geological or topographical features.

The difficulties in developing steep slopes include, but are not limited to:

- 1) Increased water runoff as a result of the removal of vegetative cover;
- 2) Increased soil erosion after the removal of vegetative cover which may lead to landslides, slope failure, downstream impacts, damage to water quality and habitat quality;
- 3) Unstable and hazardous structures creating risk to public safety;
- 4) Difficulty in reaching locations with emergency vehicles;
- 5) Increased likelihood of septic system failure;
- 6) Difficulties in providing utilities and services;
- 7) Loss of natural beauty of the land (aesthetic value);
- 8) Loss of woodlands, which contribute to good air and water quality; and
- 9) Loss of habitat for wildlife and the potential loss of biodiversity.

Because of these and other potential issues, the City of Reading Zoning Ordinance should be

amended to include a Steep Slope Overlay District that will accomplish the following objectives:

- 1) To protect individuals and property from hazards posed by development on steep slopes;
- 2) To reduce accelerated storm water runoff and flash flood damages;
- 3) To preserve open spaces from development, thereby conserving woodlands, habitat for wildlife, and the natural beauty of the land for future generations to enjoy;
- 4) To conserve woodlands and preserve habitat for wildlife; and
- 5) To balance these public health and welfare concerns with the property interests of individuals.

SECTION 1: This Ordinance amends the City of Reading Code of Ordinances Chapter 600 Zoning to include section 600-819 Steep Slope Overlay District in order to regulate development on steep slopes and mitigate issues that accompanies such development and redevelopment and Section 600-2202 Definitions.

SECTION 2: All relevant ordinances, regulations and policies of the City of Reading, Pennsylvania not amended per the attached exhibit shall remain in full force and effect.

SECTION 3: If any section, subsection, sentence or clause of this ordinance is held for any reason to be invalid such decision shall not affect the validity of the remaining portions of the Ordinance.

SECTION 4: This Ordinance shall be effective in ten (10) days in accordance with Charter Section 219 after passage.

Enacted July 10, 2017

President of Council

Attest:

City Clerk

I, LINDA A. KELLEHER, City Clerk of the City of Reading, Pa., do hereby certify, that the foregoing is a true and correct copy of the original Ordinance passed by the Council of the City of Reading, on the 10 day of July, A. D. 20 17. Witness my hand and seal of the said City this 11 day of July, A. D. 20 17.

CITY CLERK

Submitted to Mayor: _____

Date: 2/11/17

Received by the Mayor's Office: _____

Date: _____

Approved by Mayor: _____

Date: 2/11/17

Vetoed by Mayor: _____

Date: _____

§600-819 Steep Slope Overlay District

A. Applicability

1. Any property where at least 10% of the total lot area contains slopes of 15% or greater shall be part of the Steep Slope Overlay District. Please refer to the Steep Slope Map included in the Comprehensive Plan. If you believe the property that you are improving falls in or near an area of steep slope, professional assistance is required to assess applicability of these regulations to the property.
2. The Steep Slope Overlay District is intended to guide development on steep slopes in order to promote public safety and minimize potential adverse impacts from developing on steep slopes that can pose serious threats to public safety, property, and the environment. Such impacts include increased runoff and pollution, soil erosion, slope instability, fire risk, septic system failure, and structural failure on such slopes.
3. The regulatory provisions apply to development of property located within the Steep Slope Overlay District and make recommendations for maintenance of any other properties within the Steep Slope Overlay District. For the purposes of this section:
 - a. New development means development of lots with 25% or less impervious cover prior to the proposed development for which a permit is requested.
 - b. Redevelopment means development of lots with greater than 25% impervious cover prior to the proposed development for which a permit is requested.
4. Accessory Uses and Equipment shall, to the extent feasible, not be located on or extend into the Steep Slope. Any Accessory Uses 500 square feet or greater shall require review by the Planning Commission during the plan review process. Changes to existing accessory uses shall not expand beyond the existing footprint.
5. All uses permitted by the underlying zoning district are permitted under the Steep Slope Overlay District unless they conflict with the rules and regulations set forth in this article. When there is a conflict between the regulations of the Steep Slope Overlay District and the underlying district, the regulations of the Steep Slope Overlay District shall take precedence.
6. Public utilities are permitted within the Steep Slope Overlay District.
7. It is the applicant's burden to delineate the boundaries of steep slopes on the applicant's property. The applicant's delineation should be supported by engineering and/or surveying data or mapping, testimony of a soil scientist, or other acceptable evidence enabling a reviewer to verify the applicant's determination of the slopes on the property.
8. Exemptions – Decks and patios that are less than 500 square feet and allowable accessory uses listed in individual Zoning District descriptions unless 500 square feet or larger.

B. Creation of Steep Slope Designations

Slopes in the Steep Slope Overlay District shall be separated into two different categories depending on their steepness. Different regulations shall apply to lots depending on the types of slopes found within. When steep slopes cover at least 10% of the total lot area each, the regulations that apply to the steepest slopes shall take precedence when a conflict arises. The two types of slopes are as follows:

- 1) Moderately Steep slopes: Slopes that have a grade of at least 15% but less than 25%.
- 2) Very steep slopes: Slopes that have a grade of 25% or greater.

C. Regulations that Apply to Areas that Contain Steep Slopes

The regulations in this section shall apply to all lots, regardless of size, that include steep slopes.

- 1) New development. New development shall be designed to preserve the integrity of the slopes and local landscape. In an application for a zoning permit, the applicant shall design the development with respect to the Steep Slopes in accordance with the following general limitations and the regulations in the Standards sections below relating to development on moderately steep and very steep slopes:
 - a. Any proposed new principal building and use shall not be located on the area of the lot within the Steep Slope;
 - b. Restorations and improvements to existing structures and buildings located within Steep Slope areas shall not be expanded beyond their existing footprint;
 - c. Identify strategies for avoidance and minimization of impacts and risks, including erosion and sediment control measures, cut and fill calculations, vegetation plan and other relevant factors in support of the permit and per request of the City Engineer or his/her designee.
- 2) Redevelopment. In an application for redevelopment of property, the applicant shall design the development plan in the application in a manner that does not increase slope related hazards, seeks to maintain and restore slope integrity to the extent feasible, and meets current regulations.
 - a. If redevelopment within the Steep Slope Overlay District exceeds steep slope regulations at the time of the passage of this ordinance and is damaged or destroyed in the future, the owner of the property may rebuild it to its original dimensions and footprint.

- b. Restorations and improvements to existing structures and buildings located within Steep Slope areas shall not be expanded beyond their existing footprint, unless it is not feasible to avoid Steep Slope areas and the Zoning Officer or City Planner and City Engineer find the development plan includes engineering and storm water management practices to reduce slope related hazards.
- c. Additional measures to improve the structural and environmental integrity of the existing structures are encouraged.
- d. The development plan in the application should include consideration of slope stability and erosion and sediment control measures to reduce the risk of slope instability impacts from existing and proposed redevelopment.

3) Exemptions:

- a. Decks and patios that are less than 500 square feet.
- b. Accessory uses as listed in individual Zoning District descriptions unless 500 square feet or larger.

D. General Application Information.

1) In order to determine compliance with the applicable Steep Slope Overlay requirements, an application for development shall include the following information with respect to the portion of the lot within the Steep Slope Overlay:

- Maps and schematic plans, prepared by a qualified individual (i.e. licensed surveyor, engineer, landscape architect, etc., identifying the location and natural grades of topography of steep slopes and proposed modifications, using two (2) foot contours.
 - Location, dimensions, and footprint of any proposed or existing building or structure, equipment and impervious coverage and proposed modifications.
 - Identifying the cut and fill areas and final grades of the land development.
 - Identifying the location of erosion and sediment control measures to include but not limited to silt fence, stormwater outflows, silt socks, temporary soil stockpiles, etc.
- A planting plan that includes plant species, locations, and coverage of shrubs and trees.
- A plan providing for the maintenance of permanent vegetation, stable slopes, grading, and integrity of the area.

2) Specific Application Requirements for Steep Slopes. When applying for a zoning permit that involves construction on slopes that are either moderately steep or very steep, the applicant shall provide the following information to the Zoning Administrator or City

Planner, in addition to the requirements laid out in §600-301, D:

- a. A plan by a Registered Professional Engineer or Surveyor which accurately locates the proposed use with respect to the Steep Slope Overlay District boundaries, with all pertinent information describing the proposal, and a topographical survey with contour elevations using two (2) foot contours.
- b. A plan of proposed development or use of the site, conforming to the preliminary plan requirements of the Subdivision and Land Development Ordinance, with two (2) foot contours throughout the steep slope areas proposed for development or use. Contours shall be accurately drawn from on-site survey or aerial photographic sources acceptable to the City Engineer or his/her designee.
- c. Proposed modifications to the existing topography and vegetative cover, as well as the means of accommodating storm water runoff.
- d. Specifications for building construction and materials, including cutting, filling, grading, storage of materials, and the location of water supply and sewerage facilities.
- e. Documentation of any additional engineering and/or conservation techniques designed to alleviate environmental problems that may be created by the proposed activities, in compliance with municipal sedimentation and erosion control regulations.
- f. Written confirmation from the City of Reading Fire Department that emergency access is satisfactory to provide adequate fire protection.

E. Standards for Moderately Steep Slopes

The following regulations apply to new development, and, to the extent feasible, to redevelopment, in areas that contain moderately steep slopes:

- 1) The regulations in this section shall apply to all lots, regardless of size, where at least 10% of the land contains slopes that are at least 15% but less than 25%.
- 2) The maximum disturbance area of the land that has been exclusively identified as moderately steep slopes shall be limited to 40% of the total area of the steep slopes on the lot or property being developed.
- 3) The maximum impervious coverage for the proposed use specified by the underlying zoning district shall be reduced by 15%.
- 4) The principal building shall not be located on the area of the lot that contains moderately steep slopes. If the entire area contains such slopes, the applicant must

provide the information required in the Specific Application Requirements for Steep Slopes to the Zoning Administrator or City Planner before construction may begin.

- 5) Accessory uses and driveways may be located on or traverse through moderately steep slopes, with the following limitations:
 - a) The maximum grade of a road or driveway may not exceed 10%.
 - b) Driveways shall follow the natural topography of the land if possible.
 - c) Unless exempted under Section C 3 b above, if accessory uses involve any disturbance of the land, the applicant shall provide the information outlined in the Specific Application Requirements for Steep Slopes to the Zoning Administrator or City Planner before any construction may begin.
- 6) The maximum building coverage for the proposed use specified by the underlying zoning district shall be reduced by 15%.
- 7) Uses permitted in the Preservation zone may be permitted on moderately steep slopes.
- 8) No trees with a diameter at breast height (DBH) of 8 inches or more shall be removed from moderately steep slope areas, except in accordance with a plan for the property developed in accordance with sustainable forestry management practices submitted by the applicant.
- 9) On-lot sewage disposal systems shall be permitted when approved by the City of Reading Sewage Enforcement Officer and/or the Pennsylvania Department of Environmental Protection.
- 10) Finished slopes shall not exceed 25%, unless the applicant can demonstrate that steeper slopes can be stabilized and maintained adequately to the satisfaction of the Zoning Administrator or City Planner in consultation with the City Engineer.
- 11) All cuts shall be supported by retaining walls or other appropriate retaining structures when, depending upon the nature of the soil characteristics, such structures are approved by the Zoning Administrator or City Planner, in consultation with the City Engineer, in order to prevent erosion.
- 12) Any fill placed on the lot shall be properly stabilized and, when found necessary depending upon existing slopes and soil types, supported by retaining walls or other appropriate structures as approved by the Zoning Administrator or City Planner, in consultation with the City Engineer.
- 13) Disturbance of moderately steep slopes shall be completed within one construction season. Slopes shall not be left bare during winter and spring thaw seasons.

- 14) Permanent vegetative cover must be planted on moderately steep slopes within three days of finishing construction or grading. If permanent vegetative cover is not established to cover 100% of the steep slope area it must be replanted until such permanent cover is established.

F. Standards for Very Steep Slopes

The following regulations apply to new development, and, to the extent feasible, to redevelopment, in areas that contain very steep slopes:

- 1) The regulations in this section shall apply to all lots, regardless of size, where at least 10% of the land contains slopes that have a grade of 25% or higher.
- 2) The maximum disturbance area of the land that has been exclusively identified as very steep slopes shall be limited to 10% of the total area of the very steep slopes on the lot or property being developed.
- 3) The maximum impervious coverage for the proposed use specified by the underlying zoning district shall be reduced by 20%.
- 4) Buildings or principal uses shall not be located on a very steep slopes.
- 5) In addition to the above restrictions, all accessory uses and driveways shall not be located on very steep slopes if there is the possibility of placing them in less steep areas:
 - a) If the applicant has no alternative but to place those accessory uses and driveways on or through very steep slopes, these uses may be permitted by the Planning Commission during the plan review process.
 - b) The applicant shall provide the information required in the Specific Application Requirements for Steep Slopes to the Zoning Administrator or City Planner as part of the process of obtaining a zoning permit before any construction may take place on such slopes.
 - c) The maximum grade of a road or driveway may not exceed 10%.
 - d) Driveways shall follow the natural topography of the land if possible.
- 6) Uses permitted in the Preservation zone may be permitted on very steep slopes, provided that they shall not include any structures, impervious roads, driveways, or parking areas.
- 7) No trees with a diameter at breast height (DBH) of 8 inches or more shall be removed from very steep slope areas, except in accordance with a plan for the property developed in accordance with sustainable forestry management practices submitted by

the applicant.

- 8) The use of on-lot sewage disposal systems on very steep slopes shall not be permitted.
- 9) Finished slopes shall not exceed 33% unless the applicant can demonstrate that steeper slopes can be stabilized and maintained adequately to the satisfaction of the Zoning Administrator or City Planner in consultation with the City Engineer.
- 10) All cuts shall be supported by retaining walls or other appropriate retaining structures when, depending upon the nature of the soil characteristics, such structures are approved by the Zoning Administrator or City Planner, in consultation with the City Engineer, in order to prevent erosion.
- 11) Any fill placed on the lot shall be properly stabilized based upon slopes and soil types, which may include compaction and other construction methods and retaining walls and other appropriate structures as required and approved by the Zoning Administrator or City Planner, in consultation with the City Engineer.
- 12) Disturbance of very steep slopes shall be completed within one construction season. Slopes shall not be left bare during winter and spring thaw seasons.
- 13) Permanent vegetative cover must be planted on very steep slopes within three days of finishing construction or grading. If permanent vegetative cover is not established to cover 100% of the steep slope area it must be replanted until such permanent cover is established.

G. Best Practices and Maintenance of Property in Steep Slope Overlay District

Landowners of lots within the Steep Slope Overlay District are encouraged to identify areas of their lots which may be subject to the regulations in this ordinance in the event that new construction or redevelopment is planned. The regulations serve to clarify expectations for all landowners in the Steep Slope Overlay District, and model best practices such as preservation of permanent vegetation, especially shrubs and trees, minimization of impervious surfaces, and maintenance of storm water control features to reduce risks to people, property and the environment from loss of slope integrity.

H. Enforcement

Enforcement of this provision shall be carried out by the Zoning Administrator in accordance with sections §600-204, §600-205, and §600-206 of the City of Reading Zoning Ordinance.

I. Limitation of Municipal Liability

The degree of steep slope protection sought by the provisions of these regulations is considered reasonable for regulatory purposes. These regulations do not imply that areas outside the Steep Slope Overlay District or permitted uses within the zoning district will be free from erosion or

slope instability. These regulations shall not create liability on the part of the City of Reading or any officer or employee thereof for any damages that result from reliance on these regulations or any administrative decision lawfully made hereunder.

J. Validity and Severability

See section §600-106 of the City of Reading Zoning Ordinance for details.

§600-2202 Definitions

By adding the following definitions:

Cut: The removal of earthen materials for the purpose of making a lot flat and fit for construction.

Diameter at Breast Height (DBH): The diameter of a tree trunk measured at a point 4.5 feet above ground level.

Disturbance – Includes without limitation removing or altering vegetative cover, excavating, filling, grading, and construction of structures, excepting agricultural activity.

Grade (in terms of slopes): The amount of vertical distance measured in feet over a one hundred foot horizontal distance. For example, if a slope is 18%, the slope rises 18 feet for every 100 feet of horizontal distance.

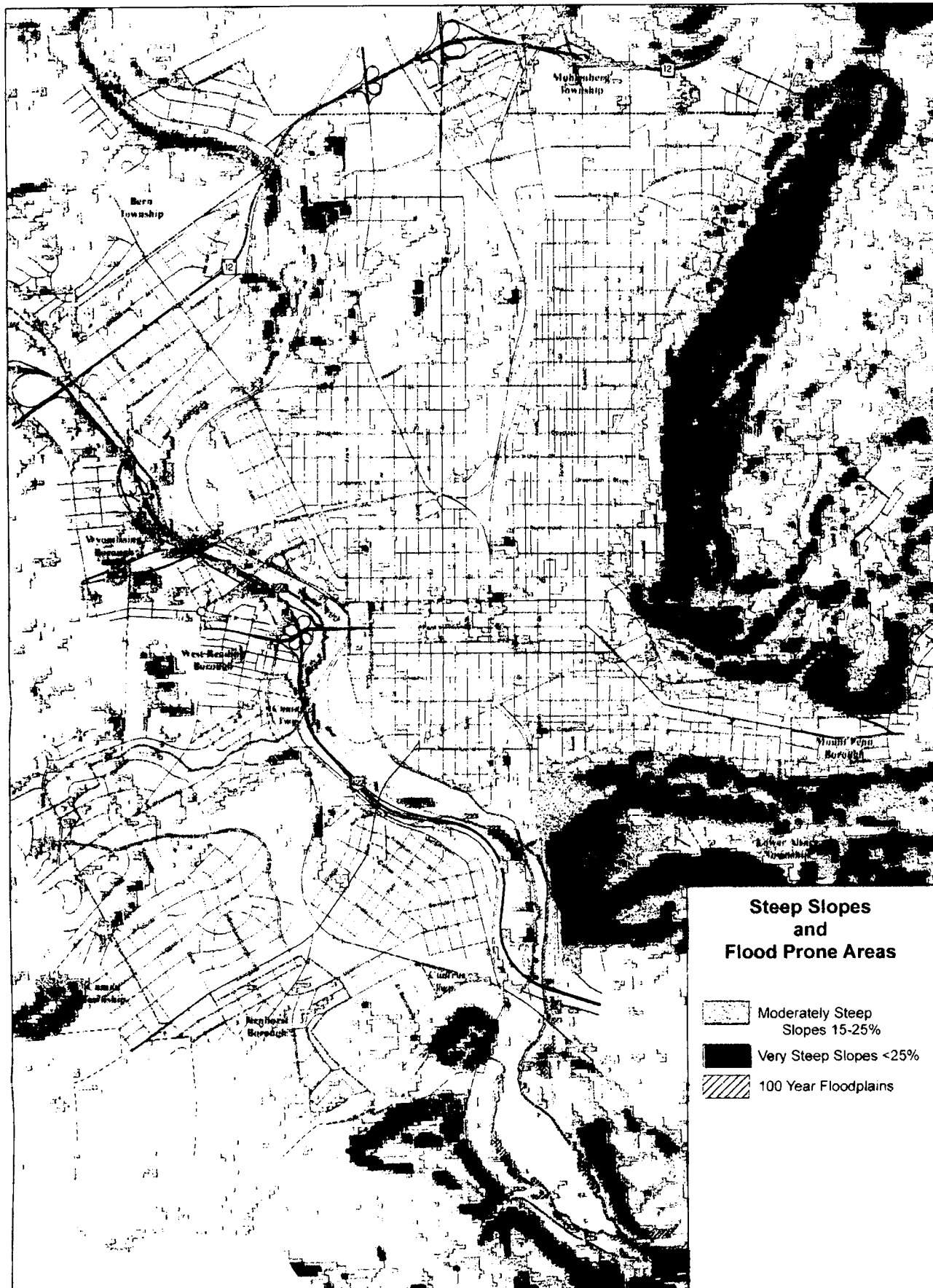
Fill: Any clean soil or rock materials used to raise the ground elevation that complies with applicable regulations for clean fill.

Moderately Steep slope: A slope that has a grade of at least 15%, but less than 25%.

Permanent Vegetative Cover – A minimum uniform perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation.

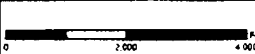
Steep Slope Overlay District: Any property that contains slopes with at least a 15% grade.

Very steep slope: A slope that has a grade of 25% or higher.



City of
READING
 Berks County, Pennsylvania

SOURCE:
 Berks County, 2014



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