

## BOARD OF COUNTY COMMISSIONERS WARREN COUNTY, OHIO

406 Justice Drive, Lebanon, Ohio 45036 www.co.warren.oh.us commissioners@co.warren.oh.us

Telephone (513) 695-1250 (513) 261-1250 (513) 925-1250 (937) 425-1250 Facsimile (513) 695-2054

TOM ARISS PAT ARNOLD SOUTH DAVID G. YOUNG

## BOARD OF COUNTY COMMISSIONERS WARREN COUNTY, OHIO

MINUTES: Regular Session - December 10, 2013

The Board met in regular session pursuant to adjournment of the December 5, 2013, meeting.

Tom Ariss - present

David G. Young - present

Pat Arnold South - present

Tina Osborne, Clerk - present

Minutes of the December 3, 2013 meeting were read and approved.

13-1835	A resolution was adopted to enter into a Cooperative Agreement with the Board of County Commissioners of Butler County, Ohio and the City of Monroe, Ohio for the Butler-Warren Road Bridge #2-9.16 replacement project.  Vote: Unanimous
13-1836	A resolution was adopted to authorize the President or Vice President of this Board to sign a Satisfaction of Mortgage for the Estate of Beulah Robinson. Vote: Unanimous
13-1837	A resolution was adopted to approve various Refunds. Vote: Unanimous
13-1838	A resolution was adopted to approve Appropriation Decreases within Various Funds. Vote: Unanimous
13-1839	A resolution was adopted to approve a Cash Advance from General Fund #101 into Fund #479 Airport Construction and approve Supplemental Appropriation into Fund #479. Vote: Unanimous
13-1840	A resolution was adopted to approve Repayment of Cash Advances from Airport Construction Fund #479 into County General Fund #101. Vote: Unanimous

13-1841	A resolution was adopted to approve Supplemental Appropriation into #101 and Operating Transfers into Common Pleas Court Construction Fund #494, Telecommunication Construction fund #492, Facilities Management Construction fund #467, Armco Park Fund #944 and Juvenile Construction Fund #496. Vote: Unanimous
13-1842	A resolution was adopted to approve Supplemental Appropriations into Municipal Victim Witness Fund 255. Vote: Unanimous
13-1843	A resolution was adopted to approve Appropriation Adjustment within Facilities Management Fund #101-1600. Vote: Unanimous
13-1844	A resolution was adopted to approve Appropriation Adjustments within Sheriff's Office Funds #101-2200 and #101-2210. Vote: Unanimous
13-1845	A resolution was adopted to approve Appropriation Adjustment within Economic Development Fund #101-1116. Vote: Unanimous
13-1846	A resolution was adopted to approve Appropriation Adjustment within County Garage Fund #101-1620. Vote: Unanimous
13-1847	A resolution was adopted to approve Appropriation Adjustment within Coroner's Fund #101-2100. Vote: Unanimous
13-1848	A resolution was adopted to approve Appropriation Adjustment within Emergency Services/Communications Fund #101-2850. Vote: Unanimous
13-1849	A resolution was adopted to authorize Payment of Bills. Vote: Unanimous
13-1850	A resolution was adopted to approve Appropriation Decreases within Various Funds. Vote: Mr. Young – yea; Mr. Ariss – yea; Mrs. South – abstain

## DISCUSSIONS

On motion, upon unanimous call of the roll, the Board accepted and approved the consent agenda.

MINUTES
DECEMBER 10, 2013
PAGE 3

Mike Yetter, Zoning Supervisor, was present along with representatives from the Steamside Setback Committee, Rural Zoning Commission, Soil and Water Conservation District, and Dawn Johnson, Warren County GIS Director.

Mr. Yetter stated that the Committee has met extensively and also toured areas of the county affected that would be affected by implementation of a streamside setback and stated his desire for the Board to consider the initiation of a text amendment to the Warren County Rural Zoning Code for either mandatory or voluntary streamside setbacks (proposed amendments attached) along the streams determined to qualify by the Warren County GIS maps.

Pam Jones, Streamside Setback Committee Member and Member of the Warren County Rural Zoning Commission, reviewed the proposed text with the Board for the mandatory setback provision. She informed the Board that the text amendment would only apply to new construction, not existing homes. She then reviewed the proposed three tier setback zones that included a mandatory setback, a recommended setback and a preferred setback.

Dawn Johnson, Warren County GIS Department, stated that the data used to determine the affected streams was a formula developed by the Ohio State University many years ago that allows precise measurement of water developed for Darby Creek in Franklin County.

Mrs. Jones stated that the intention of the three tier setback is to educate the public on the possibility of water damage to their property.

Fred Grimm, Rural Zoning Commission, stated that upon his initial review of the legislation, he was in favor of a voluntary requirement. He then stated that during the year long process of reviewing the legislation and touring the County, he feels the mandatory legislation is necessary for the protection of property and the stream.

Mrs. Jones stated that she understand that the Homebuilders' Association is opposed to the legislation because they are a business and this would affect their bottom lines. She stated that they are in the business for a profit for personal.

Greg Greeland, Developer on the Streamside Setback Committee, stated that zoning is not the place to regulate water issues. He then stated that a ten page document cannot protect our streams and stated his opposition to the mandatory text amendment.

Sandy Lykes, Warren County resident, questioned where the exemptions within the proposed legislation are located that states sheds, gazebos and anything without a foundation are permitted.

Stan Williams, Regional Planning Commission, provided the requested information.

Jim Obert, Ohio Valley Development Council of the Cincinnati Homebuilders Association (HBA), stated the misinterpretation of the letter from them. He stated that the HBA would not be pursuing litigation but rather the property owner that cannot build on their property due to the regulations. He stated his opposition to the proposed text amendment.

MINUTES DECEMBER 10, 2013 PAGE 4

Commissioner Young questioned if our zoning re-write completed in 2011 requiring larger lots would eliminate the mandatory requirement.

There was discussion relative to the balance between property owner rights vs. government's role in protecting property.

George Oberer, Jr., 3<sup>rd</sup> generation developer, stated there are numerous rules and regulations that regulate stormwater and the Warren County Rural Zoning Code is not the appropriation location. He stated that Hamilton County addresses the issue through the Subdivision Regulations and through stormwater easements and setbacks through the Ohio EPA, Health Department, etc. He stated his opposition to the proposed regulations.

Upon further discussion, the Board continued this work session to January 14, 2014, at 9:30 a.m.

Tiffany Zindel, Deputy County Administrator, was present for a work session to discuss the 2014 budget.

Upon motion the meeting was adjourned.

Tom Ariss, President

Pat Arnold South

David G. You

I hereby certify that the foregoing is a true and correct copy of the minutes of the meeting of the Board of County Commissioners held on December 10, 2013, in compliance with Section 121.22 O.R.C.

ina Osborne, Clerk

Board of County Commissioners

Warren County, Ohio

# **VOLUNTARY** STREAM PROTECTION OVERLAY (SPO)

Purpose: Stream Health

Steam Bank Stability

Reduce Damage to Properties & Structures

Stream Definition: A surface watercourse with a well-defined bed and

bank, either natural or artificial, which contains and conducts continuous or periodical flowing water.

Map: a map created by the Warren County Geographic

Information Systems Department (WCGIS), using empirical equations and the best available data to spatially locate the three streamside setback zones. In addition, the SPO Maps use data presented in USGS Topographical maps, Soil Survey Maps and ground truthing to represent the streams and resulting

overlay areas.

\* Applies to all related land-disturbing activities within the SPO except agricultural operations.

Exception: Existing land uses

Construction of single family Open space recreational uses Road ways for access easements

Establishes a 3 Zone System: (see back of page)

Voluntary regulations only apply to the closest zone of the 3

1. Recommend consultation with Soil and Water Conservation District as determined by the Warren County Zoning Supervisor when development is within one of the 3 Zone Systems.

\* Zones are based on a scientific formula that predicts where the stream will meander over time and mapped by GIS.

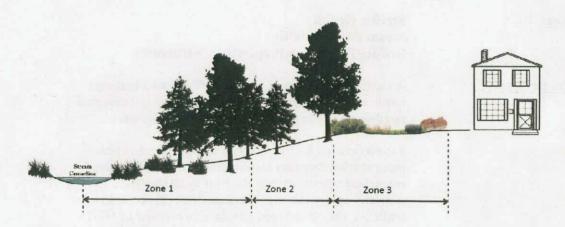
Design Standard: Zone 1, Zone 2 and Zone 3 requires education and

consultation with WCSWCD and recommends design standards and best practices for development for

each zone.

## A. The Three Zone System

Figure 1. The three zone system



The SPO is composed of three distinct zones, with each zone having its own set of standards (Zone 1) or guidelines (Zone 2 and Zone 3).

Table 1. VOLUNTARY ZONE WIDTH

Drainage Area Size	Zone 1- Zone Width Expressed in feet measured from the centerline of the stream.	Zone 2- Zone Width Expressed in feet measured from the centerline of the stream.	Zone 3- Zone
11 ac-0.5 square miles	30	50	An area, as indicated on the SPO Map, that is predictive of where a stream will meander over time.
0.5-20 square miles	45	75	
20-150 square miles	60	100	
150-300 square miles	120	200	
> 300 square miles	180	300	

## STREAM PROTECTION OVERLAY (SPO)

- PURPOSE: It is hereby determined that the network of streams within Warren County contributes to the health, safety and general welfare of the residents of Warren County. The purpose of these guidelines is to protect residents of Warren County from potential property loss and damage that can be caused by erosion, sedimentation, and other impacts of streams by providing reasonable controls of structures and land uses to ensure adequate setback from where the stream is calculated to most probably meander over time. Added benefits include the protecting and preserving of water quality and stream bank stability. The Stream Protection Overlay (SPO), Section \_\_\_\_\_\_- (hereafter referenced as this Section) serves to:
  - A. Protect the health of persons who come into contact with surface waters by reducing pollutants in streams during periods of high flows by filtering, settling, and removing pollutants in stream-side areas before runoff flows into streams.
  - B. Protect the health of persons who come into contact with surface waters by reducing aquatic nuisance species and maintaining diverse and connected stream-side vegetation which serves to maintain high water quality.
  - C. Provide high-quality stream habitats which provide food and protection in support of a wide array of wildlife dependent on maintenance of diverse and connected stream-side vegetation.
  - D. Minimize encroachment of stream channels into structures, roadways etc. and, by so doing, reduce the need for costly solutions to encroachment impacts, such as dams and riprap; protect structures, reduce property damage and threats to the health and safety of watershed residents, users and occupants; and by also maintaining the natural environment, scenic beauty, and rural character of Warren County, the quality of life of Warren County residents, and corresponding property values.
  - E. Minimize damage to property and structures as a result of stream erosion by providing the area necessary for natural meandering and lateral movement of stream channels.
  - F. Reduce the negative impacts of streams on properties and structures by safeguarding the natural stabilization characteristics along streams so as to minimize stream banks erosion and the downstream transport of sediments eroded from stream banks.
  - G. Reduce damage to property and structures due to flooding by ensuring there is unobstructed area along the streams to provide for unimpeded base flow as well as to absorb and accommodate the velocity of peak flows.
- 2. **DEFINITIONS.** The following definitions are intended for the interpretation and administration of this section.
  - A. SPO Best Management Practices (BMPs): practices or management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, sediment, and runoff.

#### B. SPO Development:

1 B.

- 1. The improvement of property for any purpose involving building
- 2. Subdivision or the division of a tract or parcel of land into two or more parcels

- 3. The preparation of land for any of the above purposes
- C. SPO Existing Land Use: an approved land use which, prior to the effective date of this code, is either:
  - 1. completed; or

1 1 1

- 2. under construction; or
- 3. fully approved by the governing authority; or
- the subject of a fully completed application, with all necessary supporting documentation, which has been submitted for approval to the governing authority or the appropriate government official.
- D. SPO Land-Disturbing Activity: any grading, scraping, excavating or filling of land, clearing of vegetation and any construction, rebuilding, or significant alteration of a structure.
- E. **SPO Map**: A map created by the Warren County Geographic Information Systems Department (WCGIS), using empirical equations and the best available data to spatially locate the three streamside setback zones. In addition, the SPO Maps use data presented in USGS Topographical maps, Soil Survey Maps and ground truthing to represent the streams and resulting overlay areas.
- F. **SPO Stream:** A surface watercourse with a well-defined bed and bank, either natural or artificial, which contains and conducts continuous or periodical flowing water.
- G. **SPO Stream Buffer:** A vegetated area, including trees, shrubs, and herbaceous vegetation.
- 3. APPLICABILITY: These guidelines are voluntarily applicable to the following:
  - A. This Section shall apply to all related land-disturbing activities and development within the SPO.
  - B. This Section shall not apply to agricultural operations that are exempt per Section ??.
  - C. The guidelines of this Section shall apply in combination with the underlying zoning district. The standards of this Section shall apply, whenever they are more restrictive than the underlying zoning district standards.
- 4. EXCEPTIONS: The following land uses are exempt from the recommended guidelines of this section:
  - A. Existing land uses and structures, at the time of adoption of this section, that are not recommended under these guidelines may be continued and are exempt, except as follows:
    - when the existing land use, or any building or structure involved in that use, is enlarged, increased, or extended to occupy a greater area of the SPO; or
    - when the existing land use, or any building or structure involved in that use, is moved (in whole or in part) to a portion of the property, included within the SPO.

- B. Construction of a single-family residence, including accessory uses, provided that the dwelling conforms with all other zoning regulations and the Zoning Inspector finds that:
  - the lot predates this Section and was buildable prior to the date of these guidelines; and
  - based on the size, shape or topography of the property it is not reasonably possible to construct a single-family dwelling without encroaching upon the SPO
  - new septic tank and drainage fields with locations approved post adoption of this section, will not be located within the Stream Stability Zone.
- C. Open space uses that are passive in character, but not limited to those listed in this subsection:
  - Recreational Activities. Passive recreational uses, as permitted by federal, state and local laws such as hiking, non-motorized bicycling, horseback riding, fishing, hunting, picnicking, and similar uses and associated structures including boardwalks, pathways constructed of pervious materials, picnic tables and wildlife viewing areas.
  - Removal of Trees. Individual trees may be removed if they are in danger of falling and causing damage to structures or blockage to the stream flow. Additionally, damaged or diseased trees may be removed to preserve the forest from pest infestation, disease infestation, or fire threat.
  - 3. The removal of "noxious weed" as defined by Ohio Revised Code 5579.04(A) and invasive species.
  - 4. Revegetation and/or Reforestation.

. . :

- D. Suspended or cantilevered decks or structures provided the structure is so designed that the natural vegetation remains undisturbed—except for support poles; and is of a height that supports growth of vegetation.
- E. Grassy swales, roadside ditches, drainage ditches created at the time of a subdivision to convey storm water to another system, tile drainage systems and stream culverts.
- F. Wildlife and fisheries management activities.
- G. Water quality monitoring and stream gauging.
- H. Limited crossings of designated streams through the SPO by vehicles, storm sewers, sewer and/or water lines, and public utility lines will be per the approval of local, county, and state governing agencies and as a part of the regular subdivision review process.
- One driveway crossing per stream per tax parcel will be recommended for individual landowners.
- J. Roadways crossings for major and minor subdivisions, open space subdivisions, or any other non-single family residential use. All roadway crossings shall be perpendicular to the stream flow and shall minimize the disturbance to the Stream Stability Zone and shall mitigate any necessary disturbances.

#### 5. DESIGN GUIDELINES

- A. The SPO consists of a strip of land extending along both sides of a stream and may be adjusted to include contiguous sensitive areas, such as wetlands, steep bank slopes, FEMA Flood Zones or other water bodies as follows,
  - For areas with a FEMA-defined 100-year flood plain: If the 100-year floodplain is wider than the SPO on either side of a watercourse, the SPO is extended to the outer edge of the 100-year floodplain.
  - 2. Where a wetland protected under federal or state law is identified within in the SPO, the SPO should extend to the outermost boundary of the wetland. Wetlands should be delineated through a site survey prepared by a qualified wetlands professional retained by the landowner using delineation protocols established and accepted by the U.S. Army Corps of Engineers at the time an application is made. All wetland delineations should also include the latest version of the Ohio Rapid Assessment Method for wetland evaluation approved at the time of application of the regulations. WCSWCD can assist in the coordination and review of the wetland area and subsequent SPO delineation.
  - Because the gradient of the riparian corridor significantly influences impacts on the stream, the following adjustment for steep slopes will be integrated into the SPO:
    - A. Where the average percent slope is 15%-20%: add 25 feet.
    - B. Where the average percent slope is 21%-25%: add 50 feet.
    - C. Where the average percent slope is greater than 25%: add 100 feet.

The average percent slope is to be calculated for the area within the SPO and is to be measured as a line perpendicular to the stream channel at the location where structures or uses are proposed in the plan. All of the following measurements are to be performed using most current WCGIS data and calculate the slope as follows: Change in elevation from the edge of the stream channel to edge of the SPO divided by horizontal map distance from the edge of the stream channel to the edge of the SPO.

B. The extent of the SPO and its zones are identified on the SPO Map and by definition contained in these guidelines. The dimensions or location of a zone may be adjusted upon an environmental analysis by the WCSWCD.

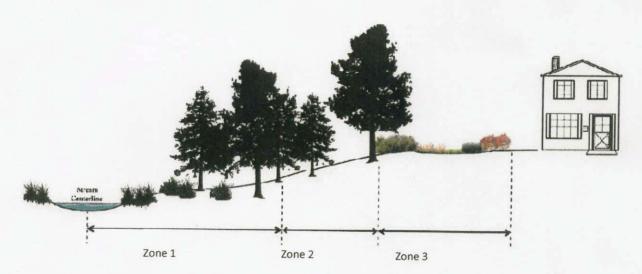


Figure 1. The three zone system

The SPO is composed of three distinct zones, with each zone having its own set of standards (Zone 1 - Stream Stability Zone) or guidelines (Zone 2 - Water Quality Zone and Zone 3 - Stream Corridor & Property Protection).

Table 1. ZONE WIDTH

Drainage Area Size	Zone 1-Stream Stability Zone Width Expressed in feet measured from the centerline of the stream.	Zone 2-Water Quality Zone Width Expressed in feet measured from the centerline of the stream.	Zone 3-Stream Corridor & Property Protection Zone
11 ac-0.5 square miles	30	50	An area, as indicated on the SPO Map, that is predictive of where a stream will meander over time.
0.5-20 square miles	45	75	
20-150 square miles	60	100	
150-300 square miles	120	200	
> 300 square miles	180	300	

## 1. Zone 1, The Stream Stability Zone

- a. Protects the stability of the stream bank and provides area for minimal stream migration.
- b. Begins at the centerline of the stream and extends a designated distance based on the size of the drainage area.
- c. In no case shall the Stream Stability Zone be less than the width of the stream.

- d. Protects an area of undisturbed natural vegetation.
- e. A consultation with WCSWCD will be initiated through the zoning process.

## 2. Zone 2, The Water Quality Zone

. . .

- a. Provides infiltration of stormwater runoff and protects water quality.
- b. Begins at the centerline of the stream and extends a designated distance based on the size of the drainage area.
- c. Recommends the protection of mature native vegetation.
- d. Consultation with the WCSWCD recommended.

## 3. Zone 3, Stream Corridor & Property Protection Zone

- a. Protects the ecological integrity of the stream corridor and provides wild life habitat.
- b. An area, as indicated on the SPO Map, that is predictive of where a stream will meander over time.
- c. Encourages the planting of native vegetation.
- d. Locating property and infrastructure outside of Zone 3 can minimize risk of future damage and loss as the stream meanders over time.
- e. Consultation with the WCSWCD is encouraged.
- Specifics for Stream Stability Zone: The Stream Stability Zone encompasses land on either side of a stream that is most sensitive to disturbance. The Stream Stability Zone of the SPO should be maintained in a naturally vegetated state. Any property owner with property or portion thereof that lies within the Stream Stability Zone is recommended to follow these guidelines.
  - a. The following land uses, unless otherwise exempt, should be refrained from within the Stream Stability Zone:
    - any land-disturbing activity;
    - 2. septic tanks and septic tank drainage fields;
    - 3. buildings, accessory structures, and impervious surfaces.
    - dredging or dumping including drilling for petroleum or mineral products, mining activity, filling or dredging of soil, spoils or any material;
    - 5. roads, parking lots or driveways except as permitted under these regulations;
    - 6. motorized vehicle use; and
    - 7. modification of natural vegetation.
  - B. The following uses are acceptable and permitted by right within the PO. Prior design approval by the Zoning Inspector and Warren County Soil and Water Conservation District (WCSWCD) is encouraged:
    - Temporary & permanent stream, stream bank, and vegetation restoration projects, the goal of which is to restore the stream or riparian zone to an ecologically healthy state. Stream bank stabilization or erosion control measures should emphasize the use of natural materials and native plant species.

- 2. Crossings by transportation facilities (such as a rail line, a roadway, a segment of roadway, or an intersection) and utility lines. However, issuance of permits for such uses or activities is contingent upon presenting alternative routing strategies that do not violate the Stream Protection Overlay guidelines as well as a mitigation plan to minimize impacts on the stream. Stream crossings shall be constructed in accordance with the following guidelines:
  - a. When affected streams are regulated by ODNR, OEPA, the Army Corp. of Engineers, or other technical experts, County officials may contact these entities as necessary.
  - b. Limited crossings of designated streams through the stream side protective setback by vehicles, storm sewers, sewer/water lines and public utility lines will be per approval of local, county and state governing agencies and in conjunction with the regular subdivision review process.
  - c. Road and driveway crossings shall be made per the regulations of the Ohio Environmental Protection Agency and the Army Corps of Engineers.
- Projects or activities serving a public need where no feasible alternative is available and the repair and maintenance of public improvements where avoidance and minimization of adverse impacts to the stream and aquatic ecosystems have been addressed.
- 4. Structures which, by their nature, cannot be located anywhere except within Zone 1 The Stream Stability Zone. These include docks, boat launches, public water supply intake structures, facilities for natural water quality treatment and purification, and public wastewater treatment plant sewer lines and outfalls.
- C. Placement of stormwater retention or detention facilities may be considered within the Stream Stability Zone in accordance with the following guidelines:
  - 1. Stormwater quality treatment that is consistent with current state standards is incorporated into the basin.
  - 2. The stormwater quality treatment basin is located at least fifty (50) feet from the top of the stream bank.

## 7. BUFFER MANAGEMENT AND MAINTENANCE

- A. The SPO can be managed to enhance and maximize the unique value of these areas and includes specific suggestions on alteration of the natural conditions of resources. Individual trees within the Stream Stability setback areas that are in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream and noxious and invasive species can be removed.
- B. All Development and Site Plans choosing to adhere to SPO protection guidelines should clearly:
  - 1. Show the extent of SPO on the subject property.
  - Contain a note that references the Stream Stability Zone and states that "There shall be no clearing, grading, construction or disturbance of vegetation except as notated on the plan".

- 8. SPO MAP: The Warren County Hydrography Dataset developed by the WCGIS may be used as a reference to determine the location of watercourses and the extent of Zone 1 3. The dataset is an electronic map, created using WCGIS software and provisions set forth in section \_\_\_\_\_ and section \_\_\_\_\_ Although the dataset is a reference and believed to be accurate, the presence or absence of a watercourse shall be based upon actual conditions on the property, current aerial photographic images, current USGS Topographic Maps, Soil Survey Maps and by determination from the WCSWCD. The zoning department, WCSWCD and/or the WCGIS may amend the dataset as necessary.
- 9. SITE VISITS: All applicants proposing land-disturbing activities on a property containing the SPO will qualify for a consultation with the Zoning Inspector or his designee. A WCSWCD representative will provide additional information, guidance and site visit in accordance with the following procedures:
  - A. The owner should notify the WCSWCD at least three (3) working days prior to the initiation of any construction, land development or soil disturbing activities if a site visit is desired.
  - B. The WCSWCD and the Zoning Inspector, with the authorization of the owner, may enter the affected lot to conduct on-site inspections to make recommendations regarding these guidelines.

# MANDATORY STREAM PROTECTION OVERLAY (SPO)

Purpose: Stream Health

Steam Bank Stability

Reduce Damage to Properties & Structures

Stream Definition: A surface watercourse with a well-defined bed and

bank, either natural or artificial, which contains and conducts continuous or periodical flowing water.

Map: a map created by the Warren County Geographic

Information Systems Department (WCGIS), using empirical equations and the best available data to spatially locate the three streamside setback zones. In addition, the SPO Maps use data presented in USGS Topographical maps, Soil Survey Maps and ground truthing to represent the streams and resulting

overlay areas.

\* Applies to all related land-disturbing activities within the SPO except agricultural operations.

**Exception:** Existing land uses

Construction of single family Open space recreational uses Road ways for access easements

Establishes a 3 Zone System: (see back of page)

Regulations only apply to the closest zone of the 3

1. Mandatory

2. Recommended

3. Preferred

\* Setbacks are based on a scientific formula that predicts where the stream will meander over time and mapped by GIS.

Use: Prohibits: Septic

New Buildings
Parking Lots
Impervious areas

Waivers: Established a waiver process whereby the zoning

inspector may modulate deliberate standard and

reduce setback requirements.

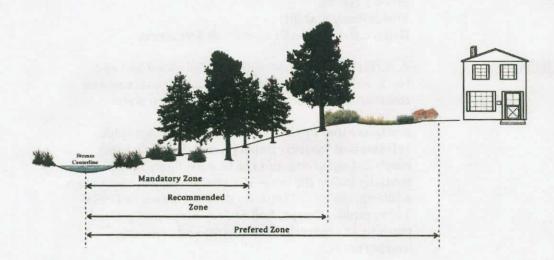
Variance: Also subject to the variance process of Section 1.307

Design Standard: Zone 2 and Zone 3 requires education and

consultation with WCSWCD

## A. The Three Zone Streamside Setback System

Figure 1. The three zone system



The SPO is composed of three distinct zones, with each zone having its own set of standards (Zone 1-Mandatory Zone) or guidelines (Zone 2-Recommended and Zone 3-Preferred).

Table 1. ZONE WIDTH

Drainage Area Size	Zone 1- Mandatory Zone Width Expressed in feet measured from the centerline of the stream.	Zone 2- Recommended Zone Width Expressed in feet measured from the centerline of the stream.	Zone 3- Preferred Zone
11 ac-0.5 square miles	30	50	
0.5-20 square miles	45	75	An area, as indicated on the SPO Map, that is predictive of where a stream
20-150 square miles	60	100	
150-300 square miles	120	200	will meander over time.
> 300 square miles	180	300	

## STREAM PROTECTION OVERLAY (SPO)

- 1. PURPOSE: It is hereby determined that the network of streams within Warren County contributes to the health, safety and general welfare of the residents of Warren County. The purpose of these regulations is to protect residents of Warren County from potential property loss and damage that can be caused by erosion, sedimentation, and other impacts of streams by providing reasonable controls of structures and land uses to ensure adequate setback from where the stream is calculated to most probably meander over time. Added benefits include the protecting and preserving of water quality and stream bank stability. The Stream Protection Overlay (SPO), Section \_\_\_\_\_\_- (hereafter referenced as this Section) serves to:
  - A. Protect the health of persons who come into contact with surface waters by reducing pollutants in streams during periods of high flows by filtering, settling, and removing pollutants in stream-side areas before runoff flows into streams.
  - B. Protect the health of persons who come into contact with surface waters by reducing aquatic nuisance species and maintaining diverse and connected stream-side vegetation which serves to maintain high water quality.
  - C. Provide high-quality stream habitats which provide food and protection in support of a wide array of wildlife dependent on maintenance of diverse and connected stream-side vegetation.
  - D. Minimize encroachment of stream channels into structures, roadways etc. and, by so doing, reduce the need for costly solutions to encroachment impacts, such as dams and riprap; protect structures, reduce property damage and threats to the health and safety of watershed residents, users and occupants; and by also maintaining the natural environment, scenic beauty, and rural character of Warren County, the quality of life of Warren County residents, and corresponding property values.
  - E. Minimize damage to property and structures as a result of stream erosion by providing the area necessary for natural meandering and lateral movement of stream channels.
  - F. Reduce the negative impacts of streams on properties and structures by safeguarding the natural stabilization characteristics along streams so as to minimize stream banks erosion and the downstream transport of sediments eroded from stream banks.
  - G. Reduce damage to property and structures due to flooding by ensuring there is unobstructed area along the streams to provide for unimpeded base flow as well as to absorb and accommodate the velocity of peak flows.
- **2. DEFINITIONS.** The following definitions are intended for the interpretation and administration of this section.
  - A. **SPO Best Management Practices (BMPs):** practices or management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxics, sediment, and runoff.

#### B. SPO Development:

- 1. The improvement of property for any purpose involving building
- 2. Subdivision or the division of a tract or parcel of land into two or more parcels

- 3. The preparation of land for any of the above purposes
- C. SPO Existing Land Use: an approved land use which, prior to the effective date of this code, is either:
  - completed; or
  - 2. under construction; or
  - 3. fully approved by the governing authority; or
  - the subject of a fully completed application, with all necessary supporting documentation, which has been submitted for approval to the governing authority or the appropriate government official.
- D. SPO Land-Disturbing Activity: any grading, scraping, excavating or filling of land, clearing of vegetation and any construction, rebuilding, or significant alteration of a structure.
- E. SPO Map: A map created by the Warren County Geographic Information Systems Department (WCGIS), using empirical equations and the best available data to spatially locate the three streamside setback zones. In addition, the SPO Maps use data presented in USGS Topographical maps, Soil Survey Maps and ground truthing to represent the streams and resulting overlay greas.
- **F. SPO Stream:** A surface watercourse with a well-defined bed and bank, either natural or artificial, which contains and conducts continuous or periodical flowing water.
- G. **SPO Stream Buffer:** A vegetated area, including trees, shrubs, and herbaceous vegetation.

**SPO Variance**: A variance is a modification in streamside setback enforcement which will not be contrary to public interest and where based on specific site conditions the literal enforcement of this regulation would result in undue hardship to the applicant. A SPO Variance is not necessarily balanced by a corresponding increase in width elsewhere on the same property.

**SPO Waiver:** A waiver is a reduction in streamside setback width over a portion of a property in exchange for an increase in streamside setback width elsewhere on the same property such that the average setback width remains the same.

## 3. APPLICABILITY.

- A. This Section shall apply to all related land-disturbing activities within SPO.
- B. This Section shall apply to all proposed buildings, structures, and uses, except for that development which receives a waiver or variance as outlined in Section \_\_\_\_\_\_. or is exempted as otherwise provided in this section.
- C. This Section shall not apply to agricultural operations that are exempt per Section 1.103.7.
- D. The standards of this Section shall apply in combination with the underlying zoning district. The standards of this Section shall apply, whenever they are more restrictive than the underlying zoning district standards.
- 4. **EXCEPTIONS:** The following land uses are exempt from the provisions of this section:

- A. Existing land uses and structures, at the time of adoption of this section, that are not permitted under these regulations may be continued and are exempt, except as follows:
  - when the existing land use, or any building or structure involved in that use, is enlarged, increased, or extended to occupy a greater area of the SPO; or
  - when the existing land use, or any building or structure involved in that use, is moved (in whole or in part) to a portion of the property, included within the SPO.
- B. Construction of a single-family residence, including accessory uses, provided that the dwelling conforms with all other zoning regulations and the Zoning Inspector finds that:
  - the lot predates this Section and was buildable prior to the date of these regulations; and
  - based on the size, shape or topography of the property it is not reasonably possible to construct a single-family dwelling without encroaching upon the Mandatory Streamside Setback Zone; and
  - 3. new septic tank and drainage fields with locations approved post adoption of this section, will not be located within the Mandatory Zone.
- C. Open space uses that are passive in character, but not limited to those listed in this subsection:
  - Recreational Activities. Passive recreational uses, as permitted by federal, state and local laws such as hiking, non-motorized bicycling, horseback riding, fishing, hunting, picnicking, and similar uses and associated structures including boardwalks, pathways constructed of pervious materials, picnic tables and wildlife viewing areas.
  - Removal of Trees. Individual trees may be removed if they are in danger of falling and causing damage to structures or blockage to the stream flow. Additionally, damaged or diseased trees may be removed to preserve the forest from pest infestation, disease infestation, or fire threat.
  - 3. The removal of "noxious weed" as defined by Ohio Revised Code 5579.04(A) and invasive species.
  - 4. Revegetation and/or Reforestation.
- D. The Warren County Engineer (WCE) and Warren County Soil and Water Conservation District (WCSWCD) maintains the right of access to all streams within Warren County for purposes outlined in the Ohio Revised Code, Sections 6131.01 to 6131.64, 6133.01 to 6133.15, 6135.01 to 6135.27 and 6137.05.1.
- E. Suspended or cantilevered decks or structures provided the structure is so designed that the natural vegetation remains undisturbed— except for support poles; and is of a height that supports growth of vegetation.
- F. Grassy swales, roadside ditches, drainage ditches created at the time of a subdivision to convey storm water to another system, tile drainage systems and stream culverts.

- G. Wildlife and fisheries management activities.
- H. Water quality monitoring and stream gauging.
- Limited crossings of designated streams through the Mandatory Zone by vehicles, storm sewers, sewer and/or water lines, and public utility lines will be per the approval of local, county, and state governing agencies and as a part of the regular subdivision review process.
- J. One driveway crossing per stream per tax parcel will be allowed for individual landowners.
- K. Roadways crossings for major and minor subdivisions, open space subdivisions, or any other non-single family residential use. All roadway crossings shall be perpendicular to the stream flow and shall minimize the disturbance to the Mandatory Zone and shall mitigate any necessary disturbances.
- 5. USE: The SPO encompasses land on either side of a stream. The Mandatory Zone of the SPO must be maintained in a naturally vegetated state. Any property or portion thereof that lies within the Mandatory Zone is subject to these regulations as well as other zoning standards that apply to the parcel as a whole.
  - A. The following land uses, unless otherwise exempt, are prohibited within the Mandatory Zone:
    - 1. any land-disturbing activity;
    - 2. septic tanks and septic tank drainage fields;
    - 3. buildings, accessory structures, and impervious surfaces.
    - 4. dredging or dumping including drilling for petroleum or mineral products, mining activity, filling or dredging of soil, spoils or any material;
    - roads, parking lots or driveways except as permitted under these regulations;
    - 6. motorized vehicle use; and
    - 7. modification of natural vegetation.
  - B. The following uses are permitted by right within the Mandatory Zone with prior design approval by the Zoning Inspector and WCSWCD:
    - Temporary & permanent stream, stream bank, and vegetation restoration projects, the goal of which is to restore the stream or riparian zone to an ecologically healthy state. Stream bank stabilization or erosion control measures should emphasize the use of natural materials and native plant species.
    - 2. Crossings by transportation facilities (such as a rail line, a roadway, a segment of roadway, or an intersection) and utility lines. However, issuance of permits for such uses or activities is contingent upon presenting alternative routing strategies that do not violate the Stream Protection Overlay standards as well as a mitigation plan to minimize impacts on the stream. Stream crossings shall be permitted in accordance with the following regulations:
      - a. When effected streams are regulated by ODNR, OEPA, the Army Corp. of Engineers, or other technical experts, County officials may contact these entities as necessary.

- b. Limited crossings of designated streams through the stream side protective setback by vehicles, storm sewers, sewer/water lines and public utility lines will be per approval of local, county and state governing agencies and in conjunction with the regular subdivision review process.
- c. Road and driveway crossings shall be made per the regulations of the Ohio Environmental Protection Agency and the Army Corps of Engineers.
- Projects or activities serving a public need where no feasible alternative is available and the repair and maintenance of public improvements where avoidance and minimization of adverse impacts to the stream and aquatic ecosystems have been addressed.
- 4. Structures which, by their nature, cannot be located anywhere except within Zone 1— The Mandatory Zone. These include docks, boat launches, public water supply intake structures, facilities for natural water quality treatment and purification, and public wastewater treatment plant sewer lines and outfalls.
- C. Placement of stormwater retention or detention facilities may be considered within the Zone1 –The Mandatory Zone in accordance with the following regulations:
  - 1. Stormwater quality treatment that is consistent with current state standards is incorporated into the basin.
  - 2. The stormwater quality treatment basin is located at least fifty (50) feet from the top of the stream bank.

### 6. WAIVERS.

- A. A property owner may request a waiver from the requirements of this Section by presenting the appropriate information to the Zoning Inspector for his/her review and approval. The zoning Inspector in granting a waiver may grant reductions in front, side and rear yards; lot size and dimensions; to achieve greater distance from the Mandatory Zone and to maintain the development density allowed on the property.
- B. The Zoning Inspector may require site design, landscape planting, fencing, signs, and water quality best management practices to reduce adverse impacts on water quality and streams. The request for a waiver may be granted after the Zoning Inspector counsels with WCSWCD. All waivers shall adhere to the following criteria:
  - 1. The width of the Mandatory Zone shall only be reduced by the minimum amount possible, and never by more than twenty percent at any point;
  - Reductions in the width of the Mandatory Zone shall be balanced by corresponding increases on the same property.
  - Modulated development standards (front, side and rear yards and lot size and dimensions) will not result in greater than twenty percent increase of a maximum requirement or twenty percent decrease of a minimum requirement.
  - 4. The Zoning Inspector retains the authority to refer requests for waivers to The Warren County Board of Zoning Appeals (WCBZA). In such cases, the request will subject to the variance fee, application, process and review by the BZA.

## 7. VARIANCES.

A. A property owner may request a variance from the requirements of the Mandatory Zone by preparing the appropriate application with the Warren County zoning office.

Such requests shall be evaluated based on the criteria set forth in Section 1.307 and upon the BZA determination that the requirements of this Section represent a hardship for the landowner such that little or no reasonable economical use of the land is available without reducing the width of the Mandatory Zone. A variance may only reduce the width of the Mandatory Zone by the minimum extent necessary to provide relief.

- B. In addition to the information required in Section 1.307, Each applicant for a variance must provide documentation that describes:
  - 1. existing site conditions, including the status of the protected area; and
  - 2. the needs and purpose for the proposed project; and
  - 3. justification for seeking the variance, including how encroachment will be minimized to the greatest extent possible; and
  - 4. a proposed mitigation plan that offsets the effects of the proposed encroachment during site preparation, construction, and post-construction phases.

#### 8. DESIGN STANDARDS

- A. The SPO consists of a strip of land extending along both sides of a stream and may be adjusted to include contiguous sensitive areas, such as wetlands, steep bank slopes, FEMA Flood Zones or other water bodies as follows,
  - For areas with a FEMA-defined 100-year flood plain: If the 100-year floodplain is wider than the Mandatory Zone on either side of a watercourse, the Mandatory Zone is extended to the outer edge of the 100-year floodplain.
  - 2. Where a wetland protected under federal or state law is identified within in the Mandatory Zone, the Mandatory Zone must extend to the outermost boundary of the wetland. Wetlands must be delineated through a site survey prepared by a qualified wetlands professional retained by the landowner using delineation protocols established and accepted by the U.S. Army Corps of Engineers at the time an application is made. All wetland delineations shall also include the latest version of the Ohio Rapid Assessment Method for wetland evaluation approved at the time of application of the regulations. WCSWCD will assist in the coordination and review of the wetland area and subsequent Mandatory Zone delineation.
  - Because the gradient of the riparian corridor significantly influences impacts on the stream, the following adjustment for steep slopes will be integrated into the Mandatory Zone:
    - A. Where the average percent slope is 15%-20%: add 25 feet.
    - B. Where the average percent slope is 21%-25%: add 50 feet.
    - C. Where the average percent slope is greater than 25%: add 100 feet.

The average percent slope is to be calculated for the area within the Mandatory Zone and is to be measured as a line perpendicular to the stream channel at the location where structures or uses are proposed in the plan. All of the following measurements are to be performed using most current WCGIS data and calculate the slope as follows:

Change in elevation from the edge of the stream channel to edge of the Mandatory Zone divided by horizontal map distance from the edge of the stream channel to the edge of the Mandatory Zone.

- B. The extent of the SPO and its zones are identified on the SPO Map and by definition contained in this code. The dimensions or location of a zone may be adjusted upon an environmental analysis by the WCSWCD.
- C. The Three Zone Streamside Setback System

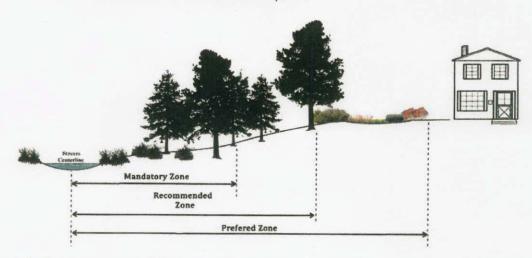


Figure 1. The three zone system

The SPO is composed of three distinct zones, with each zone having its own set of standards (Zone 1-Mandatory Zone) or guidelines (Zone 2-Recommended and Zone 3-Preferred).

Table 1. ZONE WIDTH

Drainage Area Size	Zone 1-Mandatory Zone Width  Expressed in feet measured from the centerline of the stream.	Zone 2-Recommended Zone Width Expressed in feet measured from the centerline of the stream.	Zone 3-Preferred Zone
11 ac-0.5 square miles	30	50	An area, as indicated on the SPO Map, that is predictive of where a stream will meander over time.
0.5-20 square miles	45	75	
20-150 square miles	60	100	
150-300 square miles	120	200	
> 300 square miles	180	300	

## 1. Zone 1, The Mandatory Zone

a. Protects the stability of the stream bank and provides area for minimal stream migration.

- b. Begins at the centerline of the stream and extends a designated distance based on the size of the drainage area.
- c. In no case shall the Mandatory Zone be less than the width of the stream.
- d. Protects an area of undisturbed natural vegetation.

## 2. Zone 2, The Recommended Zone

- a. Provides infiltration of stormwater runoff and protects water quality.
- Begins at the centerline of the stream and extends a designated distance based on the size of the drainage area.
- c. Recommends the protection of mature native vegetation.
- d. Requires consultation with the WCSWCD.

## 3. Zone 3, Preferred Zone

- a. Protects the ecological integrity of the stream and provides wild life
- b. An area, as indicated on the SPO Map, that is predictive of where a stream will meander over time.
- c. Encourages the planting of native vegetation.
- d. Requires consultation with the WCSWCD.

### 9. DELINEATION OF STREAM PROTECTION OVERLAY

- A. The applicant for subdivision, building and/or zoning permit approval shall indicate applicable SPO area lines, including any modifications or expansions required per this Section on the record plan, preliminary plan, sediment and erosion control plan or other construction plans of the parcel(s). To verify the delineation and evaluate the proposal, WCSWCD may require additional information and may conduct further field investigations.
- B. The developer, prior to any land-disturbing activity, shall physically delineate the SPO area on the lot with construction fencing or other suitable material. The delineation shall remain in place until the soil disturbing activities, including construction of any structures has concluded.

### 10. BUFFER MANAGEMENT AND MAINTENANCE

- A. The SPO shall be managed to enhance and maximize the unique value of these areas and includes specific limitations on alteration of the natural conditions of resources. Individual trees within the Mandatory setback areas that are in danger of falling, causing damage to dwellings or other structures, or causing blockage of the stream and noxious and invasive species may be removed.
- B. All Development and Site Plans shall clearly:
  - 1. Show the extent of SPO on the subject property
  - 2. Provide a note that references the Mandatory Zone and states that 'There shall be no clearing, grading, construction or disturbance of vegetation except as permitted by the Zoning Inspector".

### 11. BOUNDARY INTERPRETATION AND APPEALS PROCEDURE

- A. When an applicant disputes the boundary of the SPO the applicant shall submit a report to the Zoning Inspector that describes the boundary and presents justification for the proposed boundary change.
- B. The Zoning Inspector shall evaluate all materials submitted and shall make a written finding within thirty (30) days. The Zoning Inspector shall consult with the WCSWCD when reviewing the materials. During the Zoning Inspector's evaluation, additional information may be required from the applicant and the evaluation period may be extended for an addition 30 days upon receipt of the requested information. A copy of the final findings shall be submitted to the applicant.
- C. Revised SPO map shall be submitted for a Zoning Code amendment, upon the Zoning Inspectors determination that significant or numerous boundary amendments have been identified.
- D. Any party aggrieved by the determination of the Zoning Inspector may appeal to the Board of Zoning Appeals. The party contesting the location of the SPO shall have the burden of proof. Appeals shall be reviewed in accordance with Article I, Chapter 3, Section 1.310 (Appeals) of this Zoning Code.
- 12. SPO MAP: The Warren County Hydrography Dataset developed by the WCGIS may be used as a reference to determine the location of watercourses and the extent of Zone 1-The Mandatory Zone. The dataset is an electronic map, created using WCGIS software and provisions set forth in section \_\_\_\_\_ and section \_\_\_\_\_ Although the dataset is a reference and believed to be accurate, the presence or absence of a watercourse requiring protection shall be based upon actual conditions on the property, current aerial photographic images, current USGS Topographic Maps, Soil Survey Maps and by determination from the WCSWCD. The zoning department, WCSWCD and/or the WCGIS may amend the dataset as necessary.
- 13. INSPECTIONS: All applicants proposing land-disturbing activities on a property containing the SPO shall consult with the Zoning Inspector or his designee. A WCSWCD representative shall inspect the SPO in accordance with the following procedures:
  - A. The owner shall notify the WCSWCD at least three (3) working days prior to the initiation of any construction, land development or soil disturbing activities on a lot.
  - B. The WCSWCD and the Zoning Inspector, with the authorization of the owner, may enter the affected lot to conduct on-site inspections to ensure compliance with these regulations.