

## **ARTICLE 11**

### **FLOOD PLAIN MANAGEMENT**

#### **Section 1101. PURPOSE**

The purpose of this Article is to set forth flood plain management standards which are deemed necessary to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base of Lykens Township. The district will accomplish this overall purpose by: 1) regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities and frequencies; 2) restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding; 3) requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or flood proofed against flooding and flood damage; and, 4) protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

#### **Section 1102. APPLICABILITY**

These provisions shall apply to all lands within the jurisdiction of Lykens Township and identified as being subject to flooding as identified in the Flood Insurance Rate Map prepared for the Township by the Federal Emergency Management Agency (FEMA), October 15, 1985, as amended from time to time.

#### **Section 1103. COMPLIANCE**

No structure or land shall hereafter be used and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this Ordinance and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this Ordinance.

#### **Section 1104. WARNING AND DISCLAIMER OF LIABILITY**

- A. The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This Ordinance does not imply that areas outside the identified general flood plain districts, or that land uses permitted within such districts will be free from flooding or flood damages.

- B. Further, these provisions shall not create liability on the part of Lykens Township or any officer or employee thereof for any flood damages that result from reliance on these provisions or any administrative decision lawfully made hereunder.

**Section 1105. ESTABLISHMENT OF THE FLOOD PLAIN DISTRICT**

For the purposes of this Ordinance, the flood plain district shall include those areas identified as being subject to flooding as identified on the Flood Insurance Rate Map (FIRM) for Lykens Township prepared by the Federal Emergency Management Agency and effective on October 15, 1985.

**Section 1106. DELINEATION OF FLOOD PLAIN DISTRICT (F-P) BOUNDARIES**

- A. The general Flood Plain District (F-P) shall be those areas identified as Zone A on the Flood Insurance Rate Map (FIRM). Zone A designations illustrate areas of one hundred (100) year flood for which one hundred (100) year base flood elevations and flood hazard factors have not been provided.

Where the specified 100 year elevation cannot be determined for this area using other sources of information such as the (1) U.S. Army Corps of Engineers Flood plain Information Reports, (2) U.S. Geologic Survey Flood prone Quadrangles, (3) U.S.D.A Soil Conservation Service - Dauphin County Soil Survey (Alluvial Soils), (4) PA DEP Flood Control Investigations, (5) known high water marks from past floods, or other acceptable sources, then the applicant for the proposed use, development and/or activity shall determine this elevation in accordance with hydrologic and hydraulic engineering techniques approved by the Lykens Township Engineer.

- B. Hydrologic and hydraulic analyses shall be undertaken only by a professional engineer or other of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently excepted technical concepts. Studies, analyses, computations, etc. shall be submitted to the Zoning Officer in sufficient detail to allow thorough technical review by the Township Engineer.
- C. Overlay Concept
  - 1. The Flood Plain (F-P) District delineated as described above shall be an overlay district to the existing underlying districts as shown on the Lykens Township Zoning Map, and as such, the provisions for the Flood Plain (F-P) District shall serve as a supplement to the underlying district provisions.

2. Where there happens to be a conflict between the provisions or requirements of any of the Flood Plain (F-P) Districts and those of any underlying district, the more restrictive provisions shall apply.

D. Zoning Map

The boundaries of the Flood Plain (F-P) Districts are established and incorporated into the Lykens Township Zoning Map. Refer to Article 3, Designation of Districts, Section 301 and Section 302.B, herein.

E. Flood District Boundary Changes

The delineation of any of the Flood Plain (F-P) District may be revised by the Lykens Township Board of Supervisors where natural or man-made changes have occurred and/or more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers, Susquehanna River Basin Commission, or other qualified agency or individual documents the need or possibility for such change. However, prior to any such change, approval must be obtained from the Federal Emergency Management Agency (FEMA).

**Section 1107. GENERAL FLOOD PLAIN (F-P) DISTRICT PROVISIONS**

- A. All uses, activities, and development occurring within any Flood Plain District shall be undertaken, only, in strict compliance with the provisions of this Ordinance and with all other applicable codes and ordinances such as the Building Permit Ordinance, and Subdivision and Land Development Ordinance.
- B. Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels or flood ways of any watercourse, drainage ditch, or any other drainage facility or system.
- C. Prior to any proposed alteration or relocation of any stream, watercourse, etc. within the Township, a permit shall be obtained from the Pennsylvania Department of Environmental Protection, Bureau of Dams and Waterways Management. Further, notification of the proposal shall be given to all affected adjacent municipalities. Copies of such notifications shall be forwarded to both the Federal Emergency Management Agency (FEMA), the Flood Insurance Agency (FIA) and the Pennsylvania Department of Community Affairs.
- D. In the flood way of any Flood Plain (F-P) District, any new construction and/or development that would cause any increase in flood heights shall be prohibited.

**Section 1108. PERMITTED USES**

- A. In the Flood Plain District (F-P), the following uses and activities are permitted provided they are in compliance with the provisions of the underlying district and are not prohibited by any other ordinance and provided that they do not require structures, fill, or storage of materials and equipment:
1. agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting;
  2. public and private recreational uses and activities such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking, and horseback riding trails, wildlife and nature preserves, game farms, fish hatcheries, and hunting and fishing areas;
  3. accessory residential uses such as yard areas, gardens, play areas, and pervious parking area; and,
  4. accessory industrial and commercial uses such as yard areas, pervious parking and loading areas, etc.

**Section 1109. USES PERMITTED IN THE F-P DISTRICT BY SPECIAL EXCEPTION**

- A. Certain uses and activities may be permitted in the Flood Plain (F-P) District by Special Exception. Any request for Special Exception approval by the Lykens Township Zoning Hearing Board shall be processed in accordance with Article 20. The following uses may be permitted by Special Exception:
1. structures, except for manufactured homes, accessory to the uses and activities in Section 1108.A;
  2. utilities and public facilities and improvements such as railroads, streets, bridges, transmission lines, pipe lines, water and sewage treatment plants, and other similar or related uses;
  3. temporary uses such as circuses, carnivals, and similar activities;
  4. storage of materials and equipment provided that they are not buoyant, flammable or explosive, and are not subject to major damage by flooding, or provided that such material and equipment is firmly anchored to prevent flotation or movement, and/or can be readily removed from the area within the time available after flood warning; and
  5. water-related uses and activities such as docks, wharves, piers, etc.; and;

6. other uses and activities determined by the Zoning Officer to be similar to those listed above.

B. Specific Criteria for Special Exceptions

Uses listed in Section 1109.A above may be authorized by the Zoning Hearing Board in accordance with the procedures outlined in Article 24, Section 2407.B, provided that the general criteria of Article 20, Section 2003 and the following specific factors have been considered:

1. the danger to life and property due to increased flood elevations or velocities caused by encroachments;
2. the danger that materials may be swept onto other lands or downstream to the injury of others;
3. the proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions;
4. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;
5. the importance of the services provided by the proposed facility to the community;
6. the requirements of the facility for a waterfront location;
7. the availability of alternative locations not subject to flooding for the proposed use;
8. the compatibility of the proposed use with existing development and development anticipated in the foreseeable future;
9. the relationship of the proposed use to the comprehensive plan and flood plain management program for the area;
10. the safety of access to the property for ordinary and emergency vehicles in time of flood;
11. the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,
12. such other factors which are relevant to the purposes of this Ordinance.

C. Supplemental Technical Review.

The Zoning Hearing Board may refer any application and accompanying documentation pertaining to any request for a special exception to any engineer or other qualified persons or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for protection and other related matters.

D. Conditions For Approving Special Exceptions.

1. Special Exceptions shall only be issued after the Zoning Hearing Board has determined that the granting of such will not result in:
  - a. unacceptable or prohibited increases in flood heights;
  - b. additional threats to public safety;
  - c. extraordinary public expense;
  - d. the creation of nuisances;
  - e. any fraud or victimization of the public; and
  - f. any conflict with local laws or ordinances.
2. No special exception shall be granted for any proposed use, development, or activity within any flood way that will cause any increase in flood elevations.
3. Any other reasonable condition or restriction deemed necessary to protect public health, safety and welfare.

**Section 1110. PROHIBITED USES**

- A. Cemeteries;
- B. Hospitals - public or private;
- C. Incinerators;
- D. Jails;
- E. Junk Yards;
- F. Land fills;
- G. Manufactured/Mobile Home Parks;

- H. Nursing or Convalescent Homes (public or private);
- I. New manufactured/mobile home park subdivisions, and substantial improvements to existing manufactured home parks; and,
- J. Residential Dwellings
- K. Emergency response facilities such as fire, ambulance, and police stations, civil defense preparedness buildings and facilities, and evacuation and emergency medical centers.

**Section 1111. DEVELOPMENT WHICH MAY ENDANGER HUMAN LIFE**

- A. In accordance with the Pennsylvania Flood Plain Management Act (Act 166), as amended, and the regulations adopted by the Pennsylvania Department of Community and Economic Development as required by the Act, any new or substantially improved structure which will be used for the production or storage of any of the following materials or substances or which will be used for any activity requiring the maintenance of a supply (more than 550 gallons or other comparable volume or any amount of radioactive substances) of any of the following materials or substances on the premises, shall be subject to the provisions of this section, in addition to all other applicable provisions:

- 1. acetone
- 2. ammonia
- 3. benzene
- 4. calcium carbide
- 5. carbon disulfide
- 6. celluloid
- 7. chlorine
- 8. hydrochloric acid
- 9. hydrocyanic acid
- 10. magnesium
- 11. nitric acid and oxides or nitrogen
- 12. petroleum products (gasoline, fuel, oil, etc.)
- 13. phosphorus
- 14. potassium
- 15. sodium
- 16. sulphur and sulphur products
- 17. pesticides (including insecticides, fungicides and rodenticides)
- 18. radioactive substances, insofar as such substances are not otherwise regulated.

- B. Within any Flood Plain (F-P) District, any structure of the kind described in Section 1111.A, above, shall be prohibited.

**Section 1112 EXISTING STRUCTURES IN FLOOD PLAIN (F-P) DISTRICTS**

- A. A structure or use of a structure or premises which lawfully existed before the enactment of this Ordinance, but which is not in conformity with this Ordinance may be continued subject to the following conditions:
  - 1. no expansion or enlargement of an existing structure and/or use shall be allowed within any flood plain district that would cause any increase in flood heights;
  - 2. any modification, alteration, reconstruction, or improvement of any kind to an existing structure and/or use to an extent or amount of fifty (50%) percent or more of its market value shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this Ordinance; and
  - 3. any modifications, alteration, reconstruction, or improvement of any kind to an existing structure and/or use to an extent or amount of less than fifty (50%) percent of its market value, shall be elevated and/or flood proofed to the greatest extent possible.

#### **Section 1113. ADMINISTRATION**

- A. A zoning permit shall be required for all construction and development, which includes but is not limited to buildings or other structures, paving, filling, grading, excavation, mining, dredging, or drilling operations.
- B. A copy of all applications and plans for any proposed construction or development involving earth disturbance activities in any Flood Plain (F-P) District to be considered for approval shall be submitted by the Zoning Officer and to the Dauphin County Conservation District for review and comment prior to the issuance of a building permit. The recommendations of the Conservation District shall be considered by the Zoning Officer for possible incorporation into the proposed plan.

#### **Section 1114. VARIANCES**

- A. If compliance with any of the requirements of this Article would result in an exceptional hardship for a prospective builder, developer, or landowner, the Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements.
- B. Variance Procedures and Requirements.

Requests for variances shall be considered by the Zoning Hearing Board in accordance with the following:



1. No variance shall be granted for any construction, development, use or activity within any flood way area that would cause any increase in the one-hundred (100) year flood elevation.
2. Except for a possible modification of the freeboard requirements involved, no variance shall be granted for any of the other requirements pertaining specifically to Development Which May Endanger Human Life (Section 1111.A).
3. If granted, a variance shall involve only the least modification necessary to provide relief.
4. In granting any variance, the Zoning Hearing Board shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public health, safety, and welfare, and to achieve the objectives of this Ordinance.
5. In reviewing any request for a variance, the Zoning Hearing Board shall consider, but not be limited to, the following:
  - a. there is good and sufficient cause;
  - b. failure to grant the variance would result in exceptional hardship to the applicant;
  - c. the granting of the variance will not result in an unacceptable or prohibited increase in flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on, or victimization of the public or conflict with any other applicable local or State ordinance and regulations;
  - d. refer to provisions presented in Section 1109.B of this Article; and,
  - e. notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capability of resisting the one-hundred (100) year flood.
6. Whenever a variance is granted, the Zoning Hearing Board shall notify the applicant in writing that:
  - a. the granting of the variance may result in increased premium rates for flood insurance; and,
  - b. such variance may increase the risks to life and property.

7. A complete record of all variance requests and related actions shall be maintained by the Zoning Hearing Board. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Emergency Management Agency.