

# FLOOD HAZARD AREA CONTROL ACT RULES NJAC 7:13

John A. Miller, P.E., CFM, CSM  
Princeton Hydro, LLC

# **Regulated Waters**

**All waters are regulated except:**

- 1. Manmade canals: N.J.A.C. 7:13-2.2(a)1**
- 2. Coastal wetlands: N.J.A.C. 7:13-2.2(a)2**
- 3. Waters that drain less than 50 acres in three particular cases described at N.J.A.C. 7:13-2.2(a)3**

**SEE N.J.A.C. 7:13-2.2(a)**

# Regulated Waters

**A water is not regulated if it drains less than 50 acres and meets one or more of the following:**

- 1. The water has no discernible channel - such as a freshwater wetlands swale**

**SEE N.J.A.C. 7:13-2.2(a) 3i**

# **Regulated Waters**

- 2. The water is confined within a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin (not including any water that historically possessed a naturally-occurring, discernible channel, which has been piped, culverted, ditched or similarly modified)**

**SEE N.J.A.C. 7:13-2.2(a) 3ii**

# **Regulated Waters**

- 3. The water is not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet.**

# **Regulated Areas**

- **Along regulated waters there are two distinct and overlapping areas of jurisdiction:**

- 1. The flood hazard area**

- 2. The riparian zone**

# **Flood Hazard Area**

- **A flood hazard area exists along every regulated water that has a drainage area of 50 acres or more**

**SEE N.J.A.C. 7:13-2.3(a)1**

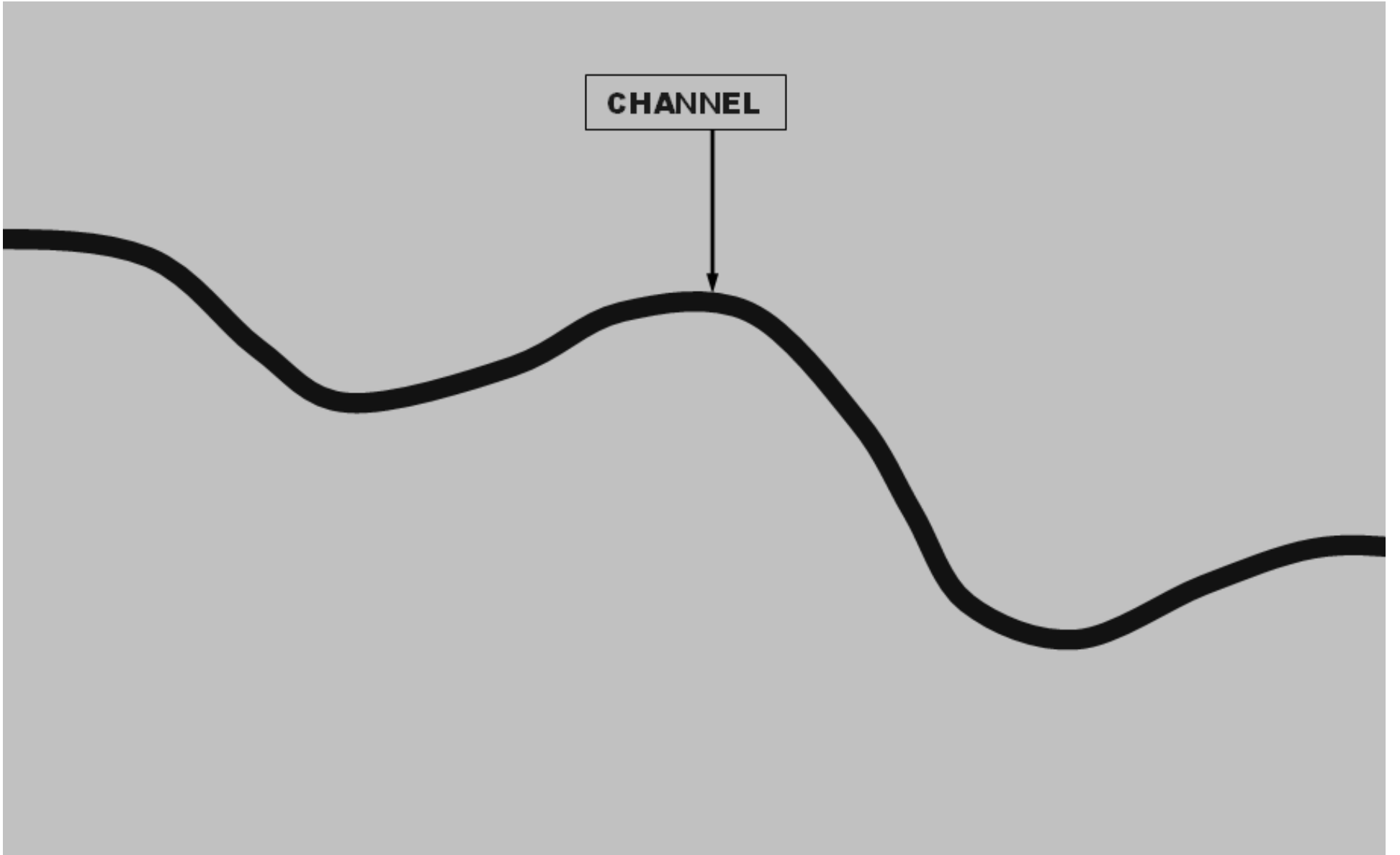
# Riparian Zone

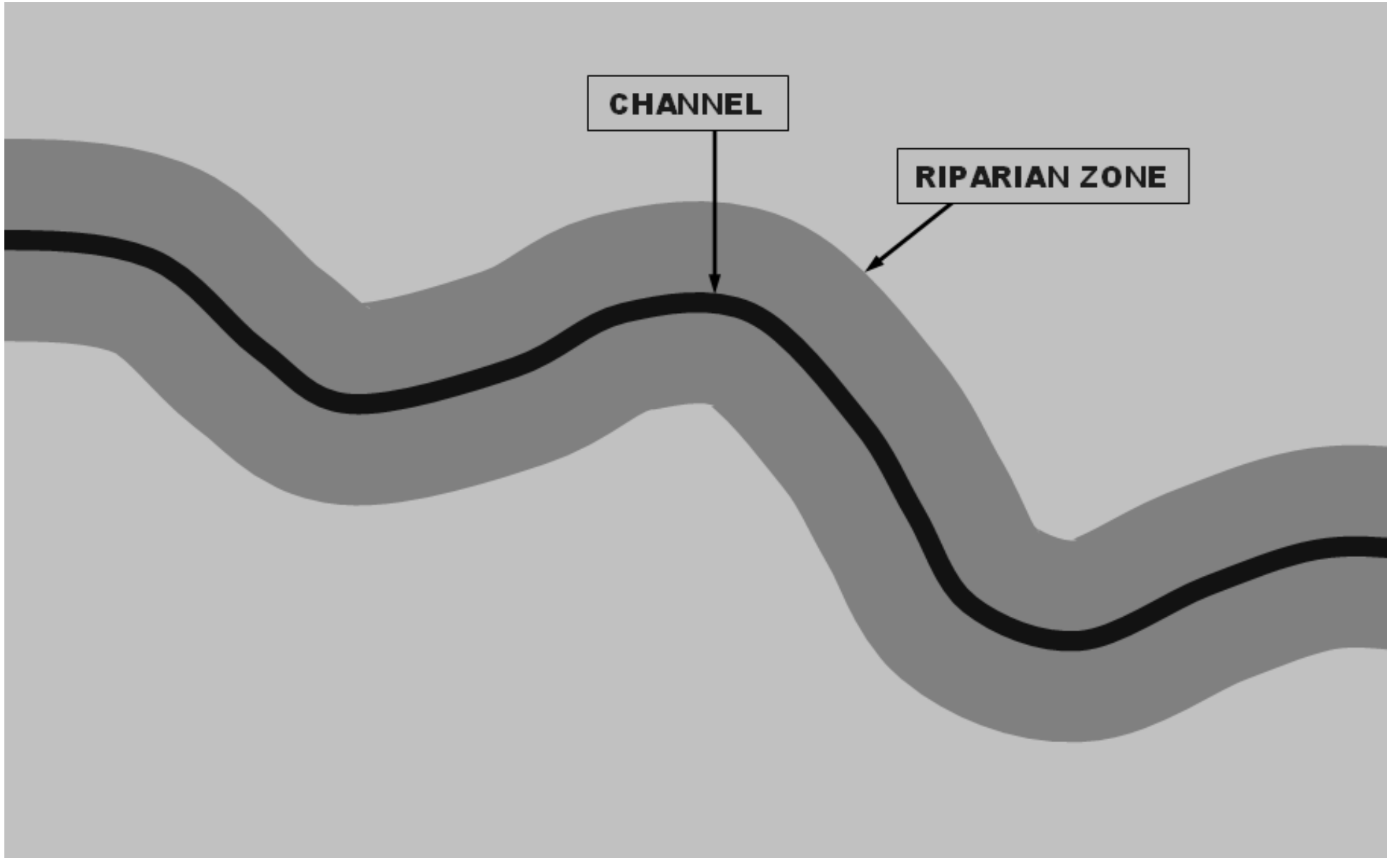
- **A riparian zone exists along every regulated water, except there is no riparian zone along:**
  - **The Atlantic Ocean**
  - **Any manmade lagoon or stormwater management basin**
  - **Any oceanfront barrier island, spit or peninsula**
  - **Any piped section of an otherwise regulated water**

**SEE N.J.A.C. 7:13-2.3(a)2**



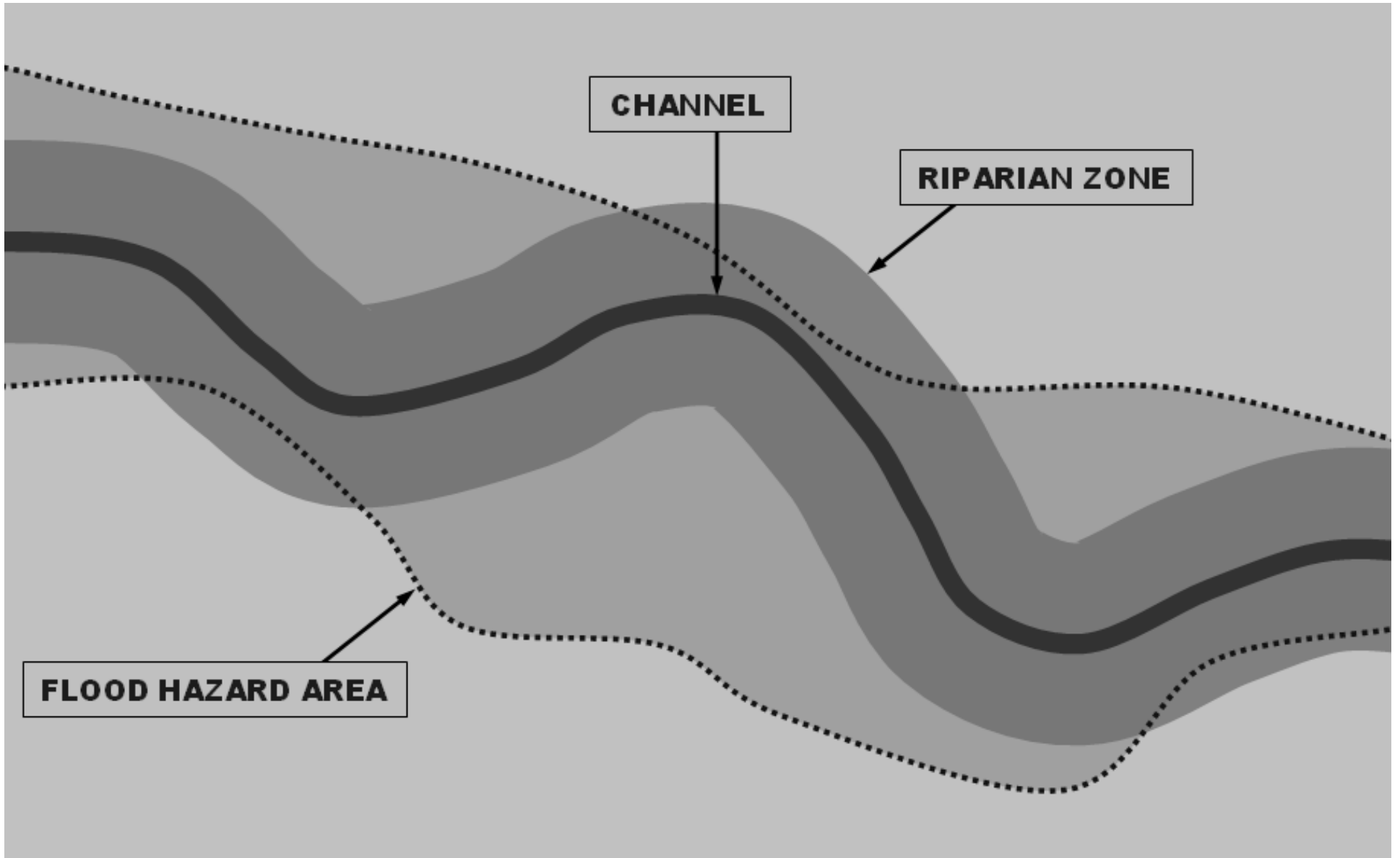
**CHANNEL**





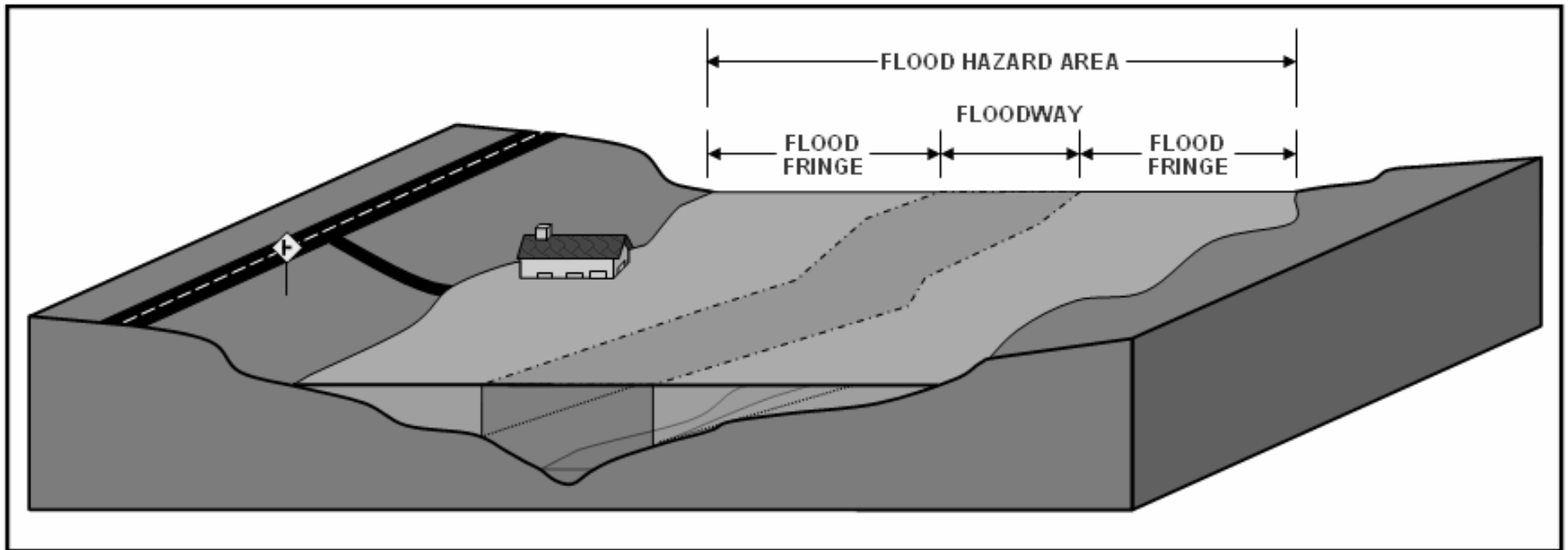
**CHANNEL**

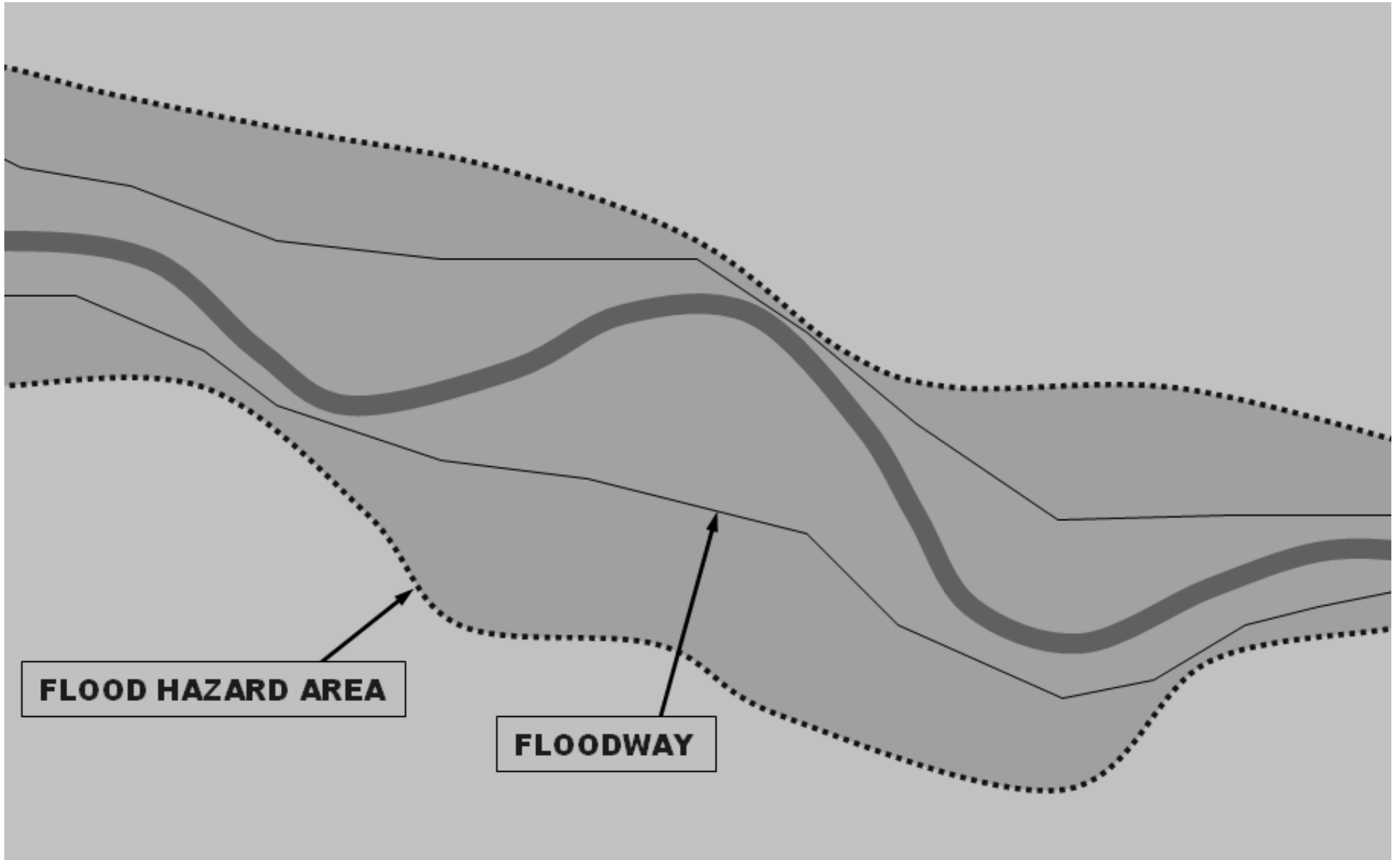
**RIPARIAN ZONE**



# Flood Hazard Area

- The flood hazard area is comprised of the floodway and flood fringe





# Flood Hazard Area

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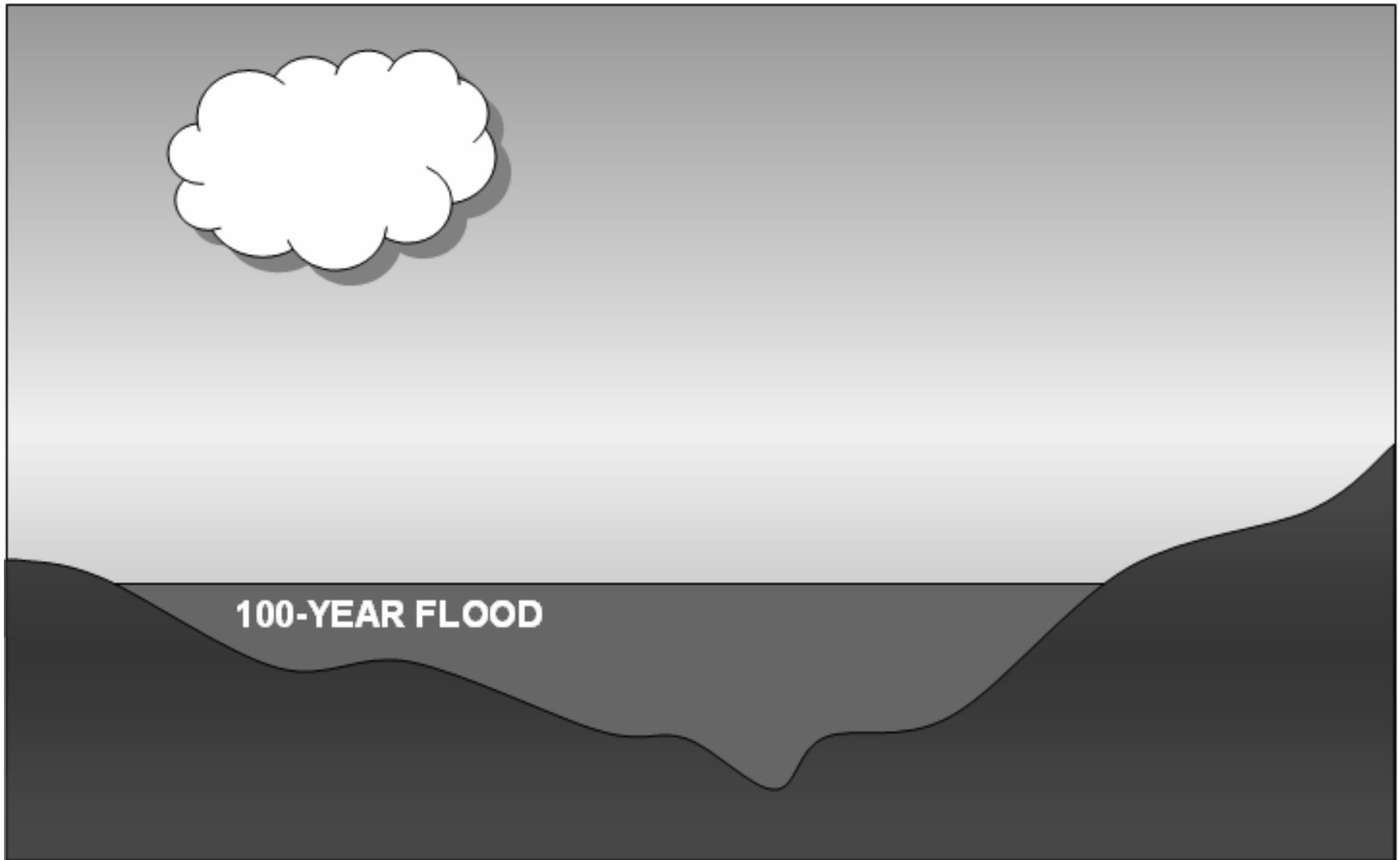
- Area inundated by the **flood hazard area design flood**
- In tidal areas: equal to 100-yr (1%) flood
- In fluvial areas: equal to 100-yr (1%) flood plus a factor of safety
  - Previous rules required assumption of full development of upstream watershed
  - New rules add different factors of safety depending on the mapping resources available

# Floodway

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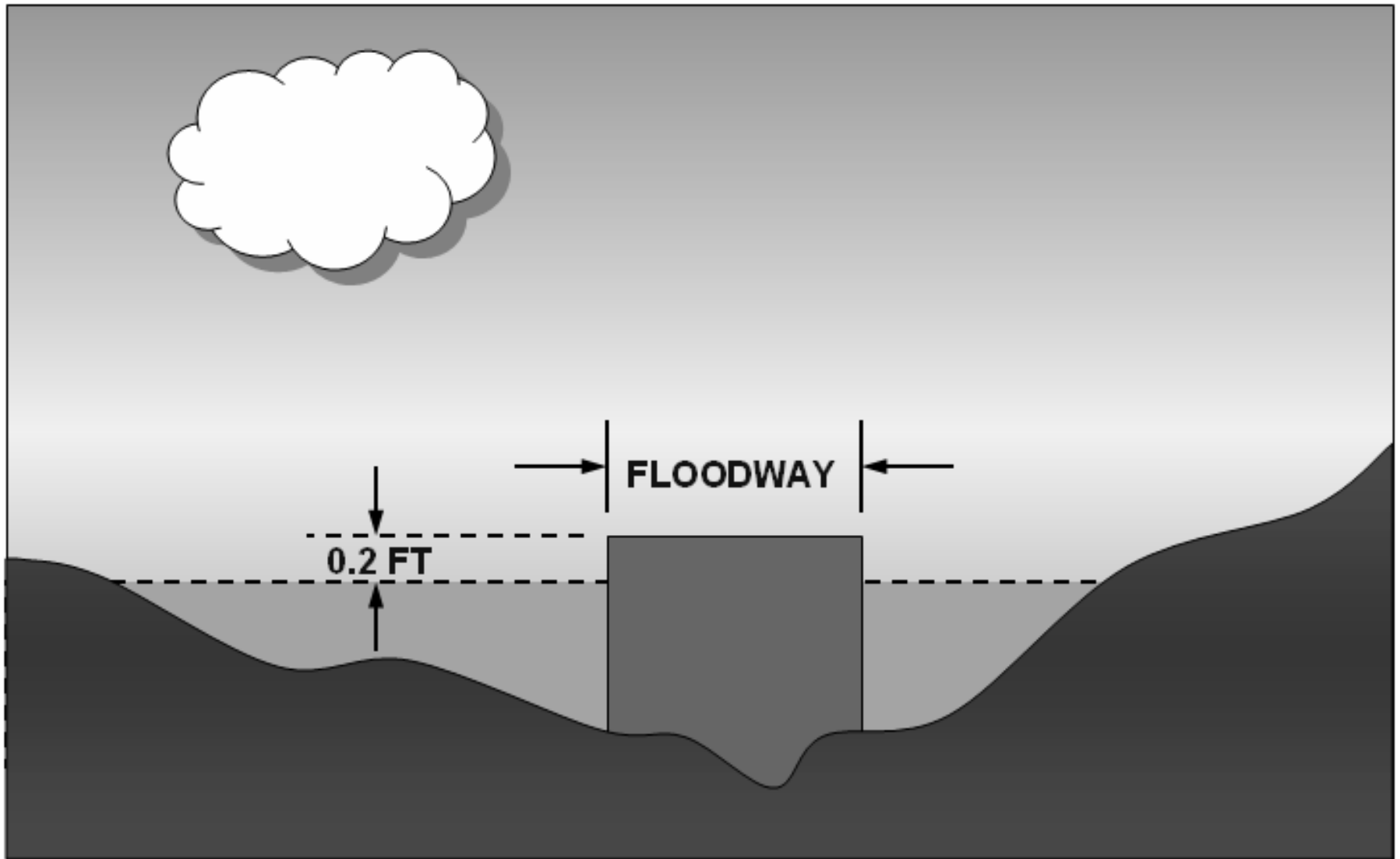
- Conveys the majority of floodwater
- Structures & other materials can obstruct flow and increase flooding
- Calculated using a 0.2-ft rise in the 100-year flood elevation

# Floodway





# Floodway

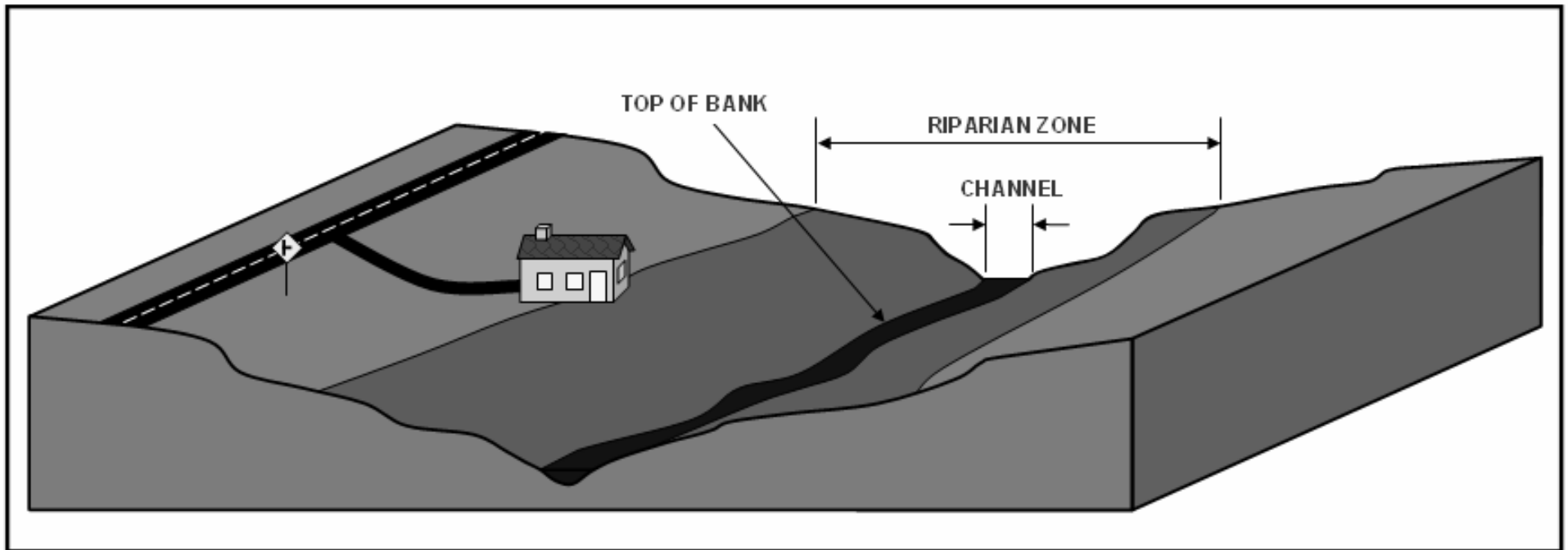


# Flood Hazard Area

- **THERE ARE 6 METHODS FOR DETERMINING THE FLOOD HAZARD AREA**
  - Method 1 (Department delineation method)
  - Method 2 (FEMA tidal method)
  - Method 3 (FEMA fluvial method)
  - Method 4 (FEMA hydraulic method)
  - Method 5 (Approximation method)
  - Method 6 (Calculation method)

# Riparian Zone

- Measures 50, 150 or 300 ft from a regulated water (previously 25 or 50 ft)



# Riparian Zone

- **300 ft along:** Category One waters and upstream tributaries within the same HUC-14 watershed
- Category One waters are listed in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B
- **Not exactly the same as the Special Water Resource Protection Area**

SEE N.J.A.C. 7:13-4.1

# 300-ft Riparian Zone

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- **Difference #1: The SWRPA applies only to waters that are shown on a USGS quad or County Soil Survey**
- **The riparian zone applies to regulated waters regardless of any mapping**

SEE N.J.A.C. 7:13-4.1

# 300-ft Riparian Zone

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- **Difference #2: The SWRPA applies only to projects that are major developments**
- **The riparian zone applies to regulated waters regardless of the size of the project**

SEE N.J.A.C. 7:13-4.1

# 150-ft Riparian Zone

1. **Trout production** waters and all tributaries
2. **Trout maintenance** waters and all tributaries within one mile
3. Waters that flow through an area that contains documented **T&E habitat** (if plant/animal is critically dependent on the regulated water for survival) and all tributaries within one mile
4. Waters that flow through an area that contains **acid producing soils**

SEE N.J.A.C. 7:13-4.1

# 50-ft Riparian Zone

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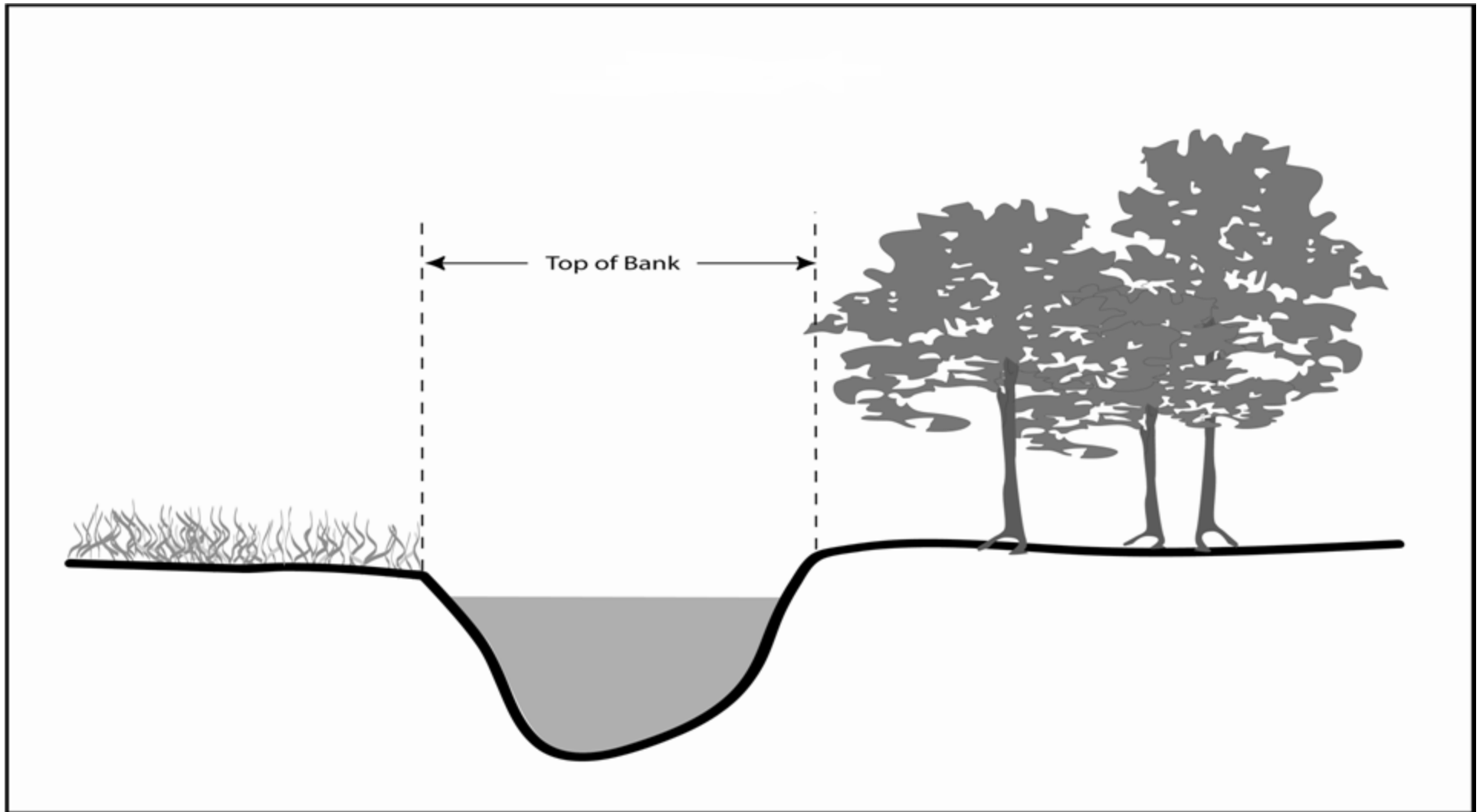
- **Along all other waters**
- **Most common riparian zone width, especially in urbanized areas (except where acid producing soils exist)**

SEE N.J.A.C. 7:13-4.1

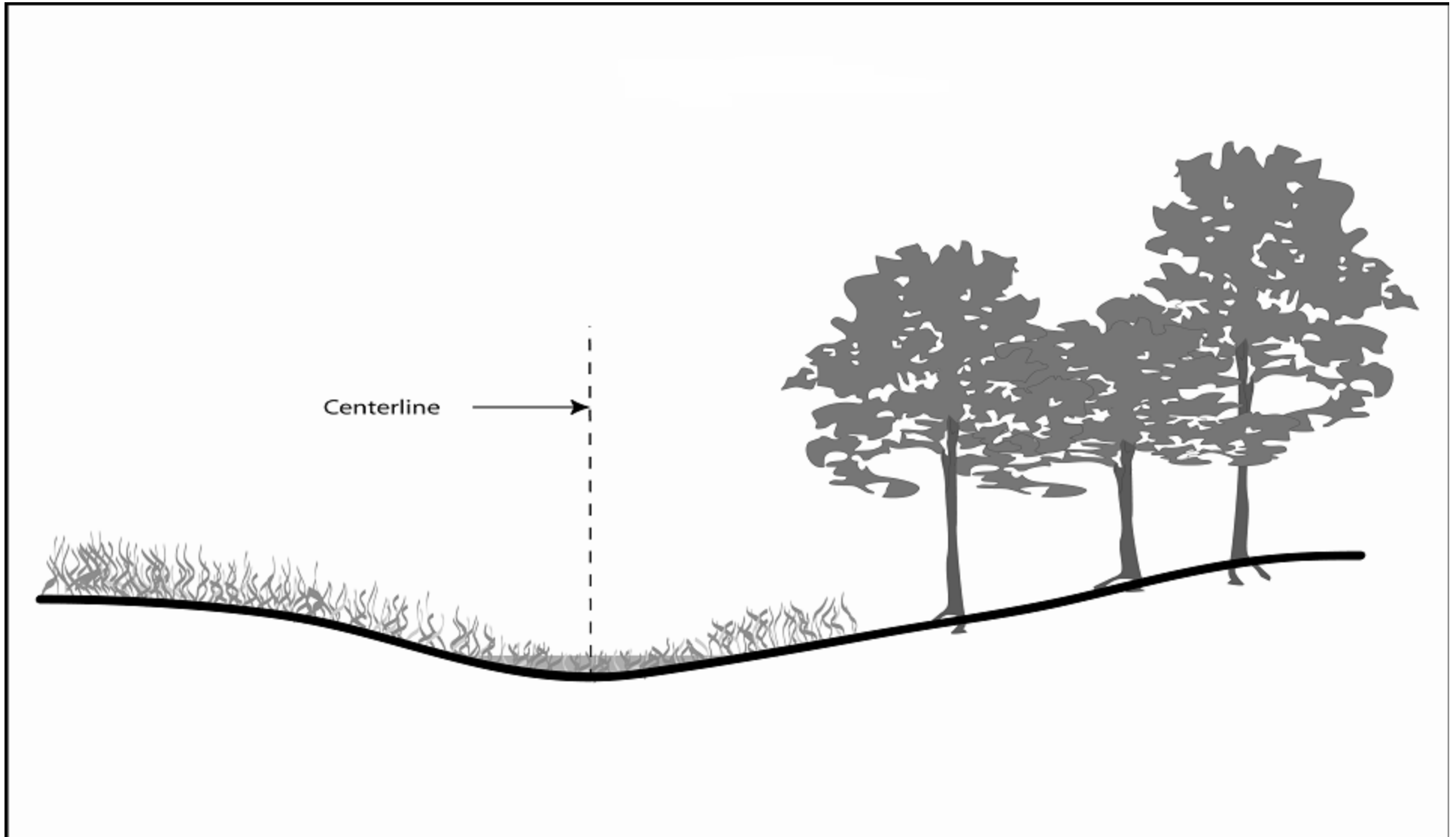


# Riparian Zone

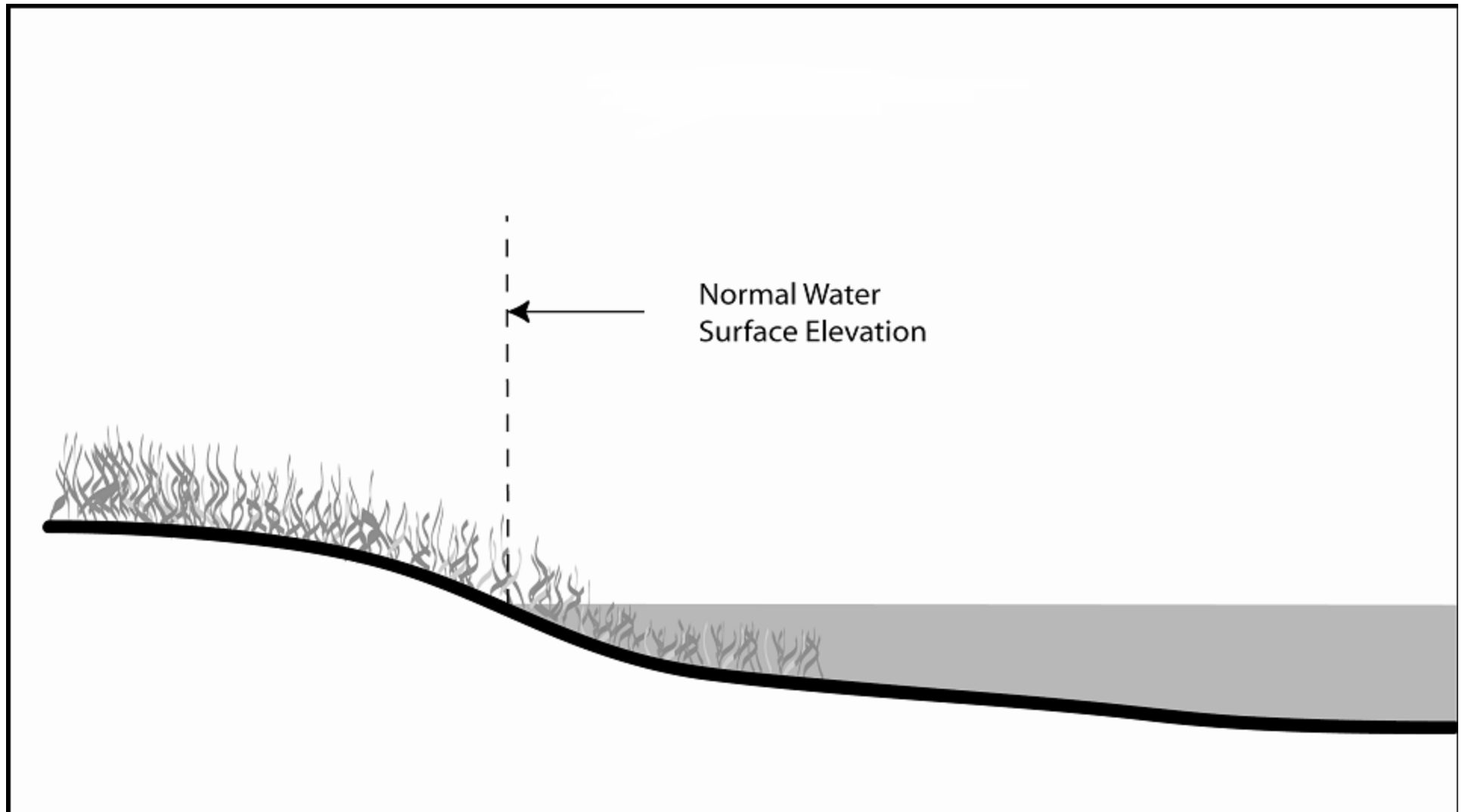
If a bank is present



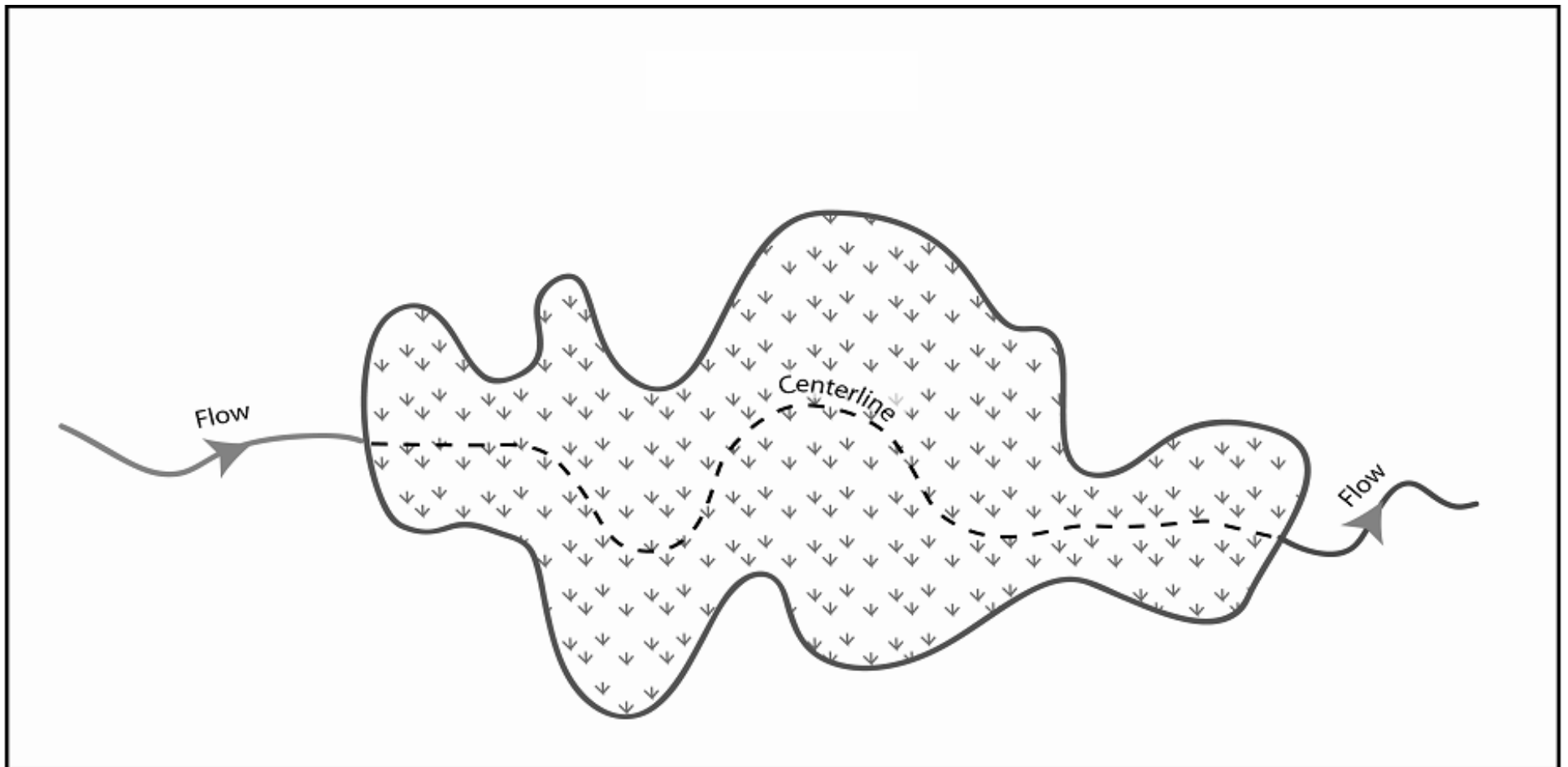
**If a discernible bank is NOT present: Along a linear fluvial or tidal water, such as a stream, the riparian zone is measured landward of the feature's centerline**

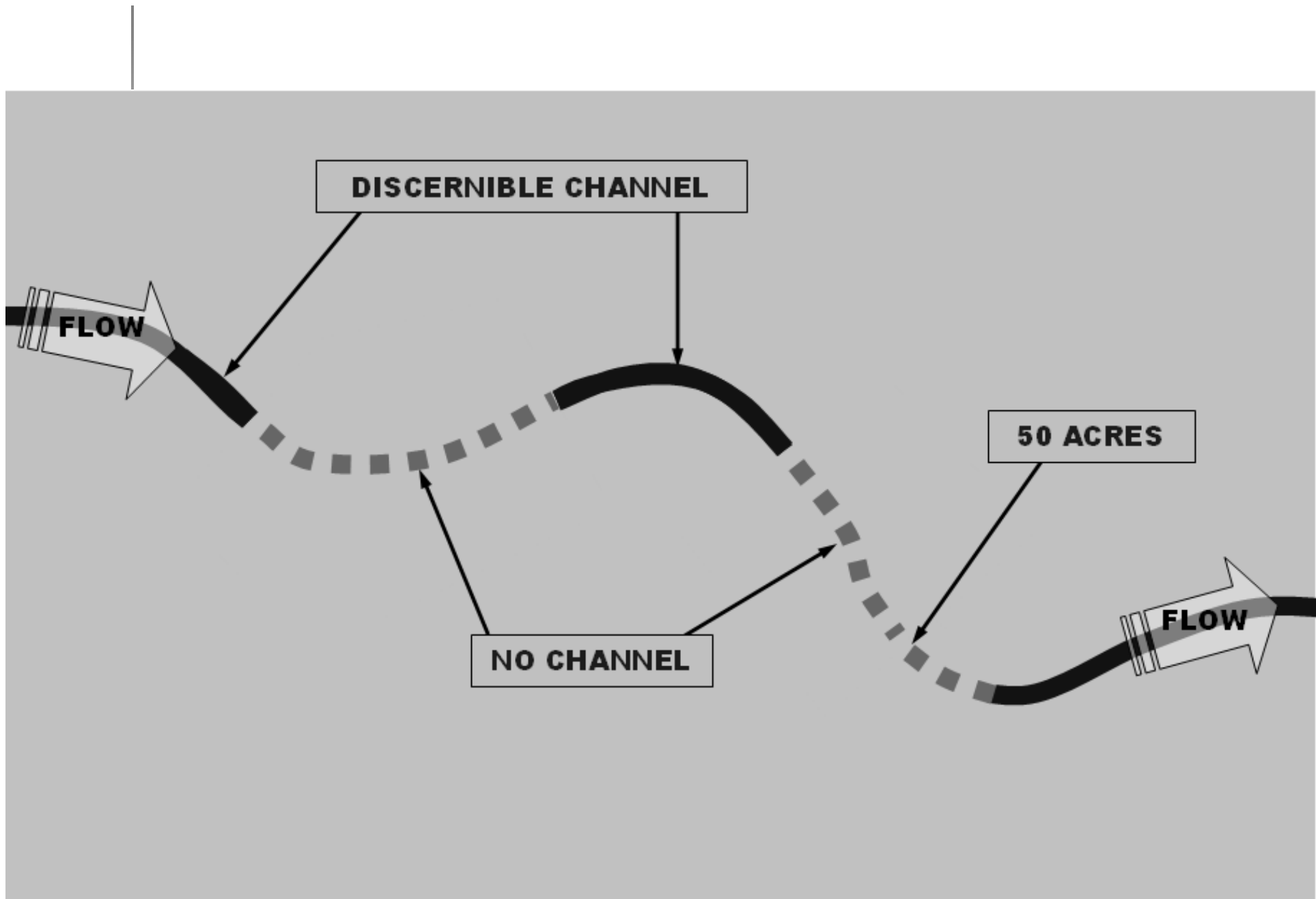


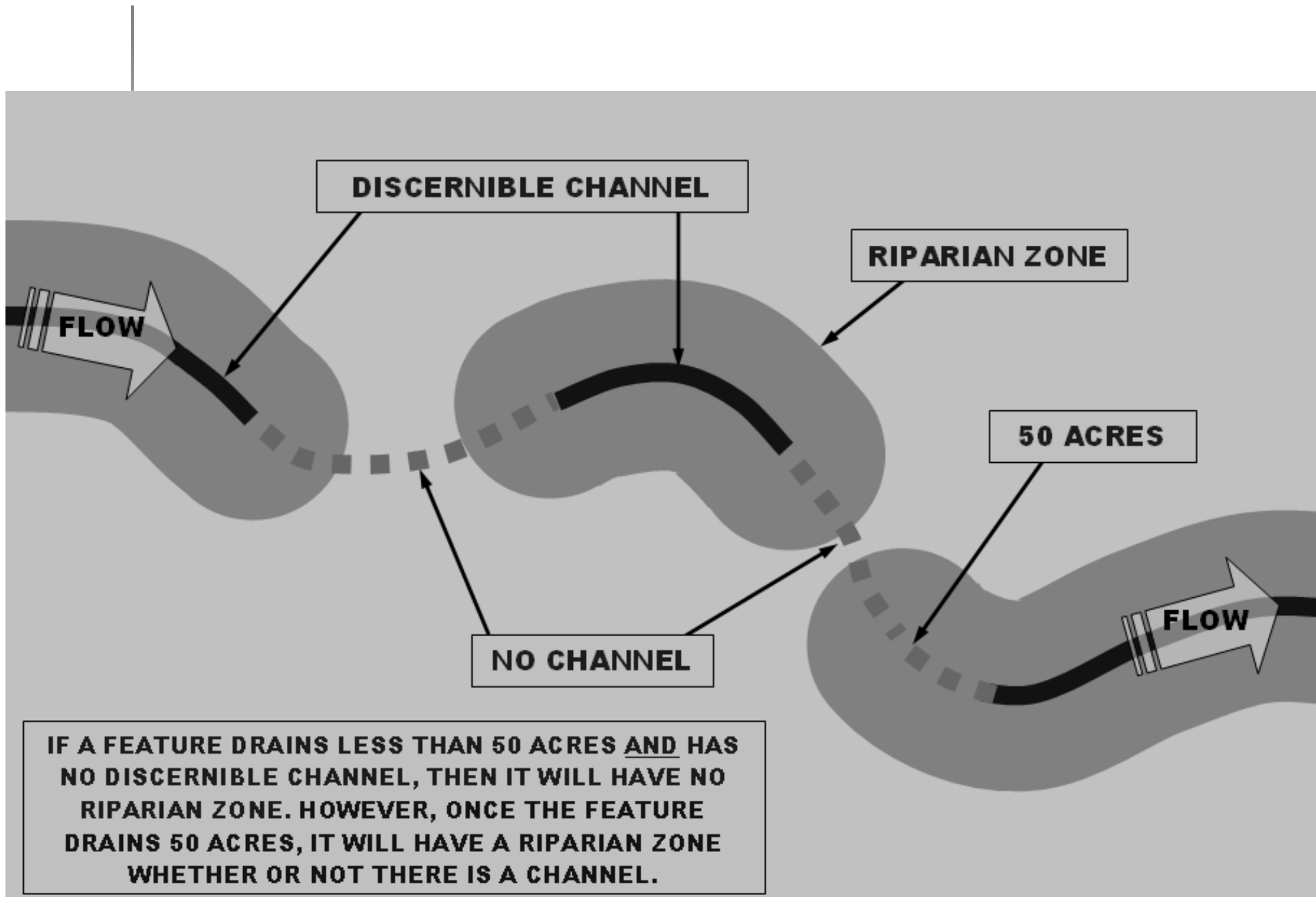
**If a discernible bank is NOT present: Along a non-linear fluvial water, such as a lake or pond, the riparian zone is measured landward of the normal water surface limit**



**If a discernible bank is NOT present: Along an amorphously-shaped feature, such as a wetland complex, through which a regulated water flows but which lacks a discernible channel, the riparian zone is measured landward of the feature's centerline**







**DISCERNIBLE CHANNEL**

**RIPARIAN ZONE**

**50 ACRES**

**NO CHANNEL**

**FLOW**

**IF A FEATURE DRAINS LESS THAN 50 ACRES AND HAS NO DISCERNIBLE CHANNEL, THEN IT WILL HAVE NO RIPARIAN ZONE. HOWEVER, ONCE THE FEATURE DRAINS 50 ACRES, IT WILL HAVE A RIPARIAN ZONE WHETHER OR NOT THERE IS A CHANNEL.**

# Regulated Activities

1. The alteration of topography through excavation, grading and/or placement of fill;
2. The clearing, cutting and/or removal of vegetation in a riparian zone;
3. The creation of impervious surface;
4. The storage of unsecured material;
5. The construction, reconstruction and/or enlargement of a structure; and
6. The conversion of a building into a private residence or a public building.

**SEE N.J.A.C. 7:13-2.4(a)**

# Permit Requirement

- Before undertaking a **regulated activity** in a **regulated area**, you must first obtain **one** of the following for the work:
  - **A permit-by-rule (N.J.A.C. 7:13-7)**
  - **A general permit (N.J.A.C. 7:13-8)**
  - **An individual permit (N.J.A.C. 7:13-9,10 & 11)**
  - **An emergency permit (N.J.A.C. 7:13-12)**
  - **A coastal permit (N.J.A.C. 7:7 and 7:7E)**

**SEE N.J.A.C. 7:13-2.1(b)**



# Coastal permits

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- The list of exempt tidal waters was deleted so that all waters in NJ are regulated under the new FHA rules
- New special area created for the riparian zone in coastal zone management rules at N.J.A.C. 7:7E-3.26

# Permit Requirement

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  - An individual permit (N.J.A.C. 7:13-9,10 & 11)
  - An emergency permit (N.J.A.C. 7:13-12)
  - A coastal permit (N.J.A.C. 7:7 and 7:7E)

**SEE N.J.A.C. 7:13-2.1(b)**

Proposed Regulated Activity	See Paragraph Below for Further Detail	Maximum Area of Vegetation Disturbance Based on the Width of the Riparian Zone			
		50-foot Riparian Zone	150-foot Riparian Zone	300-foot Riparian Zone	
<b>• Railroad or public roadway</b>					
New	Crossing a water	(e)	5,000 ft <sup>2</sup>	15,000 ft <sup>2</sup>	30,000 ft <sup>2</sup>
	Not crossing a water		2,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>	12,000 ft <sup>2</sup>
Reconstructed	Crossing a water	(f)	2,500 ft <sup>2</sup>	7,500 ft <sup>2</sup>	15,000 ft <sup>2</sup>
	Not crossing a water		1,000 ft <sup>2</sup>	3,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>
<b>• Private roadway that serves as a driveway to one private residence</b>					
New	Crossing a water	(g)	1,500 ft <sup>2</sup>	4,500 ft <sup>2</sup>	9,000 ft <sup>2</sup>
	Not crossing a water		600 ft <sup>2</sup>	1,800 ft <sup>2</sup>	3,600 ft <sup>2</sup>
Reconstructed	Crossing a water	(h)	750 ft <sup>2</sup>	2,250 ft <sup>2</sup>	4,500 ft <sup>2</sup>
	Not crossing a water		300 ft <sup>2</sup>	900 ft <sup>2</sup>	1,800 ft <sup>2</sup>
<b>• All other private roadways</b>					
New	Crossing a water	(g)	3,000 ft <sup>2</sup>	9,000 ft <sup>2</sup>	18,000 ft <sup>2</sup>
	Not crossing a water		1,200 ft <sup>2</sup>	3,600 ft <sup>2</sup>	7,200 ft <sup>2</sup>
Reconstructed	Crossing a water	(h)	1,500 ft <sup>2</sup>	4,500 ft <sup>2</sup>	9,000 ft <sup>2</sup>
	Not crossing a water		600 ft <sup>2</sup>	1,800 ft <sup>2</sup>	3,600 ft <sup>2</sup>
<b>• Bank stabilization or channel restoration</b>					
Accomplished with vegetation alone		(i)	No limit if disturbance is justified		
Other permanent disturbance			2,000 ft <sup>2</sup>	2,000 ft <sup>2</sup>	2,000 ft <sup>2</sup>
Other temporary disturbance			1,000 ft <sup>2</sup>	3,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>
<b>• Stormwater discharge (including pipe and conduit outlet protection)</b>					
Permanent disturbance		(j)	1,000 ft <sup>2</sup>	1,000 ft <sup>2</sup>	1,000 ft <sup>2</sup>
Temporary disturbance			1,000 ft <sup>2</sup>	3,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>
<b>• Utility line (temporary disturbance only)</b>					
Crossing a water		(k)	2,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>	12,000 ft <sup>2</sup>
Not crossing a water		(l)	800 ft <sup>2</sup>	2,400 ft <sup>2</sup>	4,800 ft <sup>2</sup>
<b>• Other projects</b>					
Private residence		(m)	2,500 ft <sup>2</sup>	5,000 ft <sup>2</sup>	5,000 ft <sup>2</sup>
Addition, garage, barn or shed		(n)	1,000 ft <sup>2</sup>	2,000 ft <sup>2</sup>	2,000 ft <sup>2</sup>
Flood control project		(o)	3,000 ft <sup>2</sup>	9,000 ft <sup>2</sup>	18,000 ft <sup>2</sup>
Public accessway or public access area		(p)	No limit if disturbance is justified		
Water dependent development		(q)	No limit if disturbance is justified		
All other regulated activities		(r)	1,000 ft <sup>2</sup>	3,000 ft <sup>2</sup>	6,000 ft <sup>2</sup>

# FLOOD STORAGE DISPLACEMENT

(A.K.A. NET-FILL) N.J.A.C. 7:13-10.4

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- Old rules:
  - 0% net-fill in Central Passaic Basin
  - 0% net-fill in Highlands Preservation Area
  - 20% net-fill outside these areas
  
- New rules:
  - 0% net-fill Statewide
  
- **Note: net-fill only applies in non-tidal areas**

# FLOOD STORAGE DISPLACEMENT

(A.K.A. NET-FILL) N.J.A.C. 7:13-10.4

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- Up to 20% net-fill allowed onsite provided all fill is compensated by an equal cut in same floodplain offsite
  
- Compensatory flood storage **cannot**:
  - Be in a floodway
  - Be separated from the fill by a water control structure (bridge, dam, etc.) in most cases
  - Be in an undisturbed riparian zone, SWRPA or Highlands Preservation Area buffer
  - Be in a different HUC14 watershed as the fill
  - Cause significant adverse environmental consequences

# Elevating structures

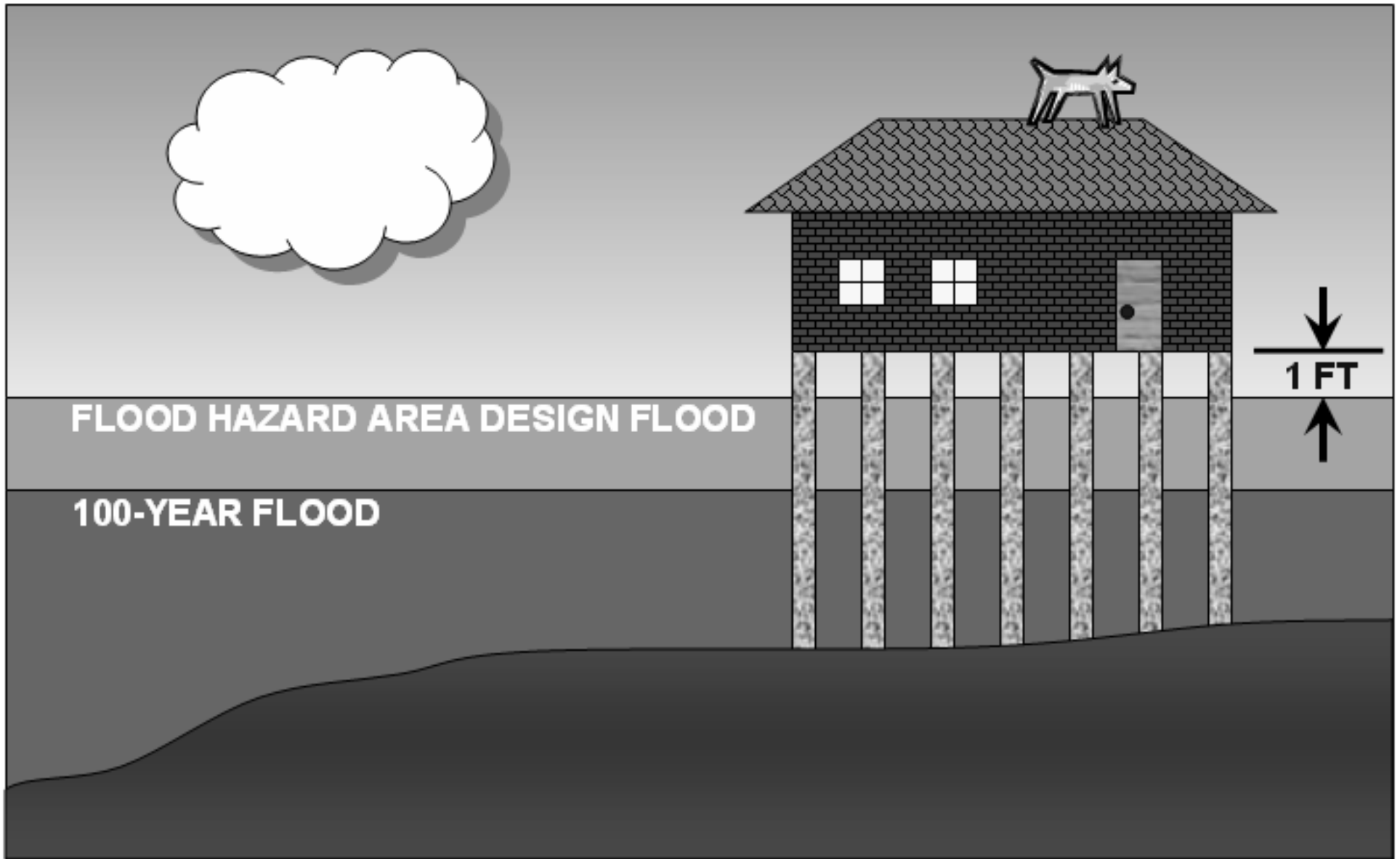
N.J.A.C. 7:13-11.5

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- Lowest habitable floor of buildings must be constructed at least 1 foot above the flood hazard area design flood elevation
- Note: when FEMA maps are used, the flood hazard area design flood is 1 foot above the FEMA 100-year flood in non-tidal areas. So lowest floor must be constructed 2 feet above FEMA 100-year elevation.

# Elevating structures

N.J.A.C. 7:13-11.5



# Elevating structures

N.J.A.C. 7:13-11.5

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- Open area beneath a structure must be:
  - A garage under 625 square feet in footprint
  - OR**
  - A crawl space that is not more than 6 feet in height measured from floor to floor
  
- If the above is not possible, then at least 25% of the exterior walls of the enclosed area must remain permanently open



FLOOD HAZARD AREA  

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CONTROL ACT RULES  
NJAC 7:13

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Princeton Hydro, LLC



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## **The role of environmental commissions**

# Site Plan Review

- Municipal Land Use Law states when ERI completed, boards shall make informational copy of every application for development available to EC

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- Failure to make such informational copy available shall not invalidate any hearing or proceeding.
- Common member on the Planning Board

# Get Involved Early

- Conceptual stage best
- Development application, even if not complete
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Check for updates

# Review Plans

- Work as a group
  - Use your ERI
  - Check wetlands delineations on site
- 
- Ask for determinations from DEP
    - LOI
    - Verification of flood hazard design elevations

# Check to see what permits applied for/pending/ approved

- Commission gets NJPDES and Wetlands
  - Clerk gets Flood Hazard Area
  - NJ DEP Bulletin for listing of permits
- 
- [www.nj.gov/dep/bulletin/index.html](http://www.nj.gov/dep/bulletin/index.html)

# Report to Planning Board

## ■ Finding of Facts

- Permits needed/LOI or other determination
- Other factors to consider

## ■ Recommendations

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- Modifications to avoid need for state permit?
- Lessen impact?
- Approve with conditions – all state permits

# Contacting DEP

- Developer's application often the only info DEP gets
- ERI provides info on local resources

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- Be aware of DEP timetable
- Special concerns may require trip to DEP to review application



# ANJEC Resource Center

- [resourcecenter@anjec.org](mailto:resourcecenter@anjec.org)
- (973) 539-7547

