

# Regulating Stream and River Flooding

*Streams and rivers provide drinking water for over half of New Jersey's population as well as providing scenic beauty, recreational opportunities and wildlife habitat. Stream systems extend stream banks (riparian area), immediately adjacent land; floodplains; adjacent wetlands; and ecosystems of important biological diversity. Protecting the entire stream system or stream corridor is the best way to protect the stream's health and water quality.*

## Regulations Background

In August, 2004, the US Federal Emergency Management Agency ([FEMA](#)) declared flooding to be New Jersey's number one natural hazard. From 1993 until April 2010, New Jersey experienced 1,241 floods causing more than \$1.25 billion in property damage and resulting in 14 deaths and 197 injuries. Between 2010 and 2018, FEMA issued 13 major disaster declarations in New Jersey related to storms or flooding. According to New Jersey Department of Environmental Protection, approximately 35 percent of New Jersey residents live in floodplains.

The NJ [Flood Hazard Area \(FHA\) Control Act Rules](#) initially adopted in 2007 was amended in 2016. The Act incorporates stringent standards for development in flood hazard areas and adjacent to surface waters in order to mitigate the adverse impacts to flooding and the environment that can be caused by such development. A flood hazard area exists along every regulated water that has a drainage area of 50 acres or more.

## Flood Hazard Area Permit Application Process

The application process includes a provision for verifications of flood hazard design elevation, floodway limits, and riparian zone limits. The provision facilitates project planning by establishing clear parameters before expensive design begins. There are several permit categories including permits-by-rule; general permits, and individual permits.

### Permits-by-Rule

These are automatically issued by DEP for certain minor construction activities, like building a fence, pool, shed, or small home addition. No application or fee is necessary as long as construction meets the requirements spelled out in the [permit-by-rule activities](#).

### General Permits

General permits require a simplified application and minor fee to NJDEP for certain types of construction activities that are too large to be authorized under a permit-by-rule. Activities covered by [general permits](#) include: channel cleaning; scour protection; trail construction; relocation and reconstruction of damaged buildings; maintenance of stormwater structures.

### Individual Permits

[Individual permits](#) are issued for larger construction activities. An application and fee must be submitted to NJDEP, who will generally visit the site before and after construction to ensure that flooding is not exacerbated, and the environment is being protected.

## Riparian Zones

The FHA establish the following regulated [riparian zones](#):

- 300 feet along both sides of Category One waters (and all upstream tributaries within the same HUC-14 watershed);
- 150 feet along trout production waters and all upstream tributaries; trout maintenance waters (and tributaries within one mile upstream) and waters flowing through an area that contains documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the regulated water for survival (and tributaries within one mile upstream)
- 50 feet along all other waters. No riparian buffer is established for coastal waters.

The riparian zone regulations limit the area of vegetation that can be disturbed for various regulated activities. An applicant can obtain a flood hazard area permit for disturbance of the riparian zone only if he/she meets the conditions as defined by [NJAC \(7:13-11.2\)](#); amended as of July 2019. They must establish that:

- The basic purpose of the project cannot be accomplished on site without disturbing vegetation in the riparian zone;
- Disturbance to the riparian zone is eliminated where possible and minimized where not possible by relocating the project, reducing the size of the project, or situating the project in portions of the riparian zone where previous development or disturbance has occurred;
- Any temporarily cleared area of vegetation must be replanted with indigenous, non-invasive vegetation;
- The riparian zone regulations also set a limit on the amount of disturbance allowed.

The NJDEP will issue hardship waivers for projects that go beyond the limits set for riparian zone projects. The applicants must provide 2:1 compensation in the form of revegetation and; place a deed restriction on the compensation area.

## Tools for Municipal Action

*Municipalities can enact ordinances that are stronger than the state flood hazard area rules. In these areas, development could not commence even with a state permit.*

- Stream Corridor or Buffer Ordinances establishing larger buffers than state regulations strictly control the types of activities allowed. Existing municipal ordinances allow only the following kinds of activities in stream corridors:
  - Wildlife sanctuaries, fishing, unpaved paths, maintenance of existing roads, farming, without structures and passive open space;
  - Some stream corridor ordinances
    - Prohibit impervious cover and no alteration of the natural terrain in the stream corridor.
    - Require placement of conservation easements on the stream corridor when a tract with a stream comes in for subdivision or site plan approval.
  - A number of towns define the stream corridor as the stream channel, 100 year flood plain and a minimum of 100 feet from the edge of the flood plain. If there is no delineated flood plain, the 100-foot corridor is required and measured from the top of bank. If there is an area of steep slopes, it includes 15 percent abutting the outer boundary of the stream corridor.