

DISCUSSION OF FLOODING

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Topics to be covered:

- Intensity of recent rainfalls
- Role of planning and local regulation
- Description of watersheds in Darien
- Flood Mitigation Committee work starting in 2007
- Update on Noroton Heights Train Station project
- Summary

1. Discussion of Intensity of Recent Storms

Craig Flaherty, PE

2. Role of Planning & Regulation

Jeremy Ginsberg

Darien Zoning Regulations

Section 820—Flood Damage Prevention

- First enacted in 1981.
- Thus 160+/- years of no constraints or regulation regarding development within flood zones and floodways—it is only in the past 40 years that structures and work in those zones have been regulated.
- Allows Darien property owners to participate in the flood insurance program—only possible if the Town has these regulations.

Darien Zoning Regulations

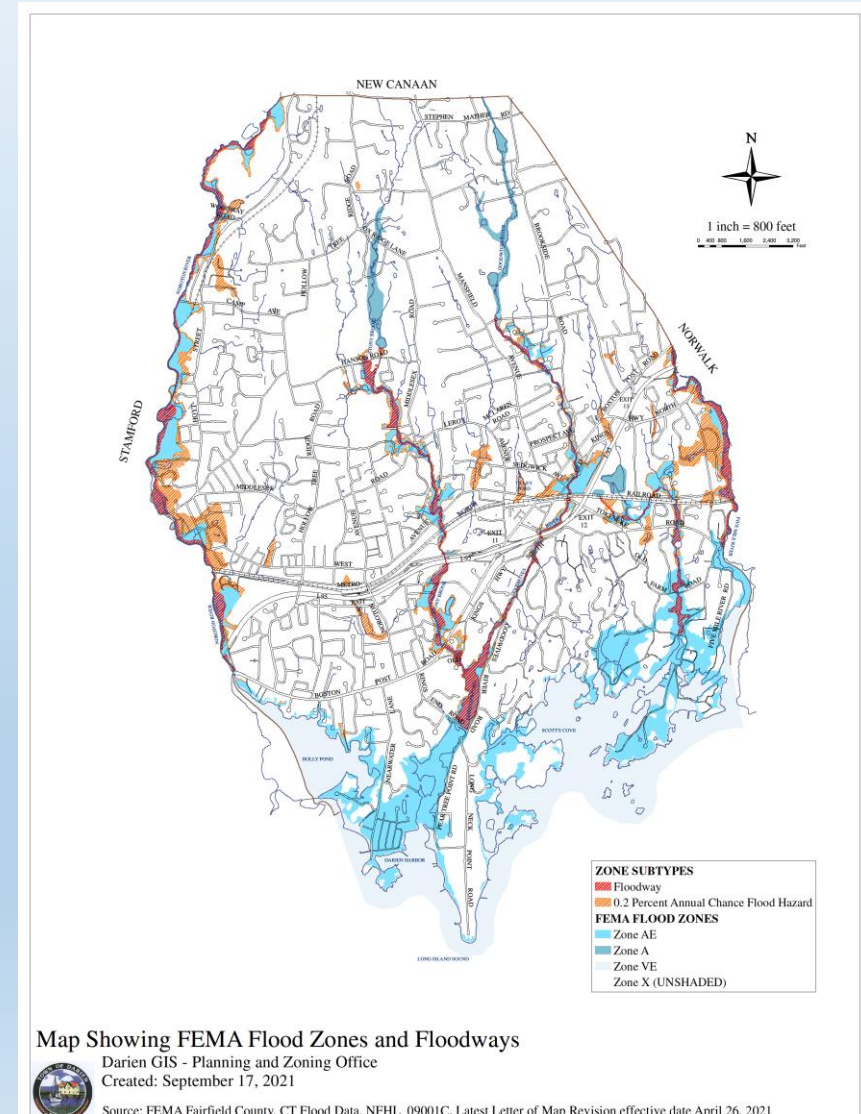
Section 820—Flood Damage Prevention

- Flood regulations must comply with FEMA requirements.
- All work within the flood zone requires formal review and action by the Planning & Zoning Commission.
- Has resulted in 25 houses being lifted within a few years after the 2007 storms—in fact, 4 of them on Cherry Street; many in Noroton Bay.
- New houses in the flood zone must be at least one foot above the base flood, and shown to cause no flooding impacts on adjacent properties.— about 25-30 of those as well in the past 8+/- years.
- Houses in flood zones cannot have basements.

Darien Zoning Regulations

Section 820—Flood Damage Prevention

- Darien is mostly redevelopment.
NOT development on vacant lots.



Darien Zoning Regulations

Section 880

Stormwater Management

- Adopted these regulations in 2009.
- Requires strict engineering design followed by review of stormwater management (Drainage) by local land use boards as part of their formal applications.
- Use of “fresh meadow approach” for new houses (whether vacant lot or replacement house)

(treat the property as if it was a meadow, not just the amount of difference in new development—a much stricter standard—one of the strictest in CT).

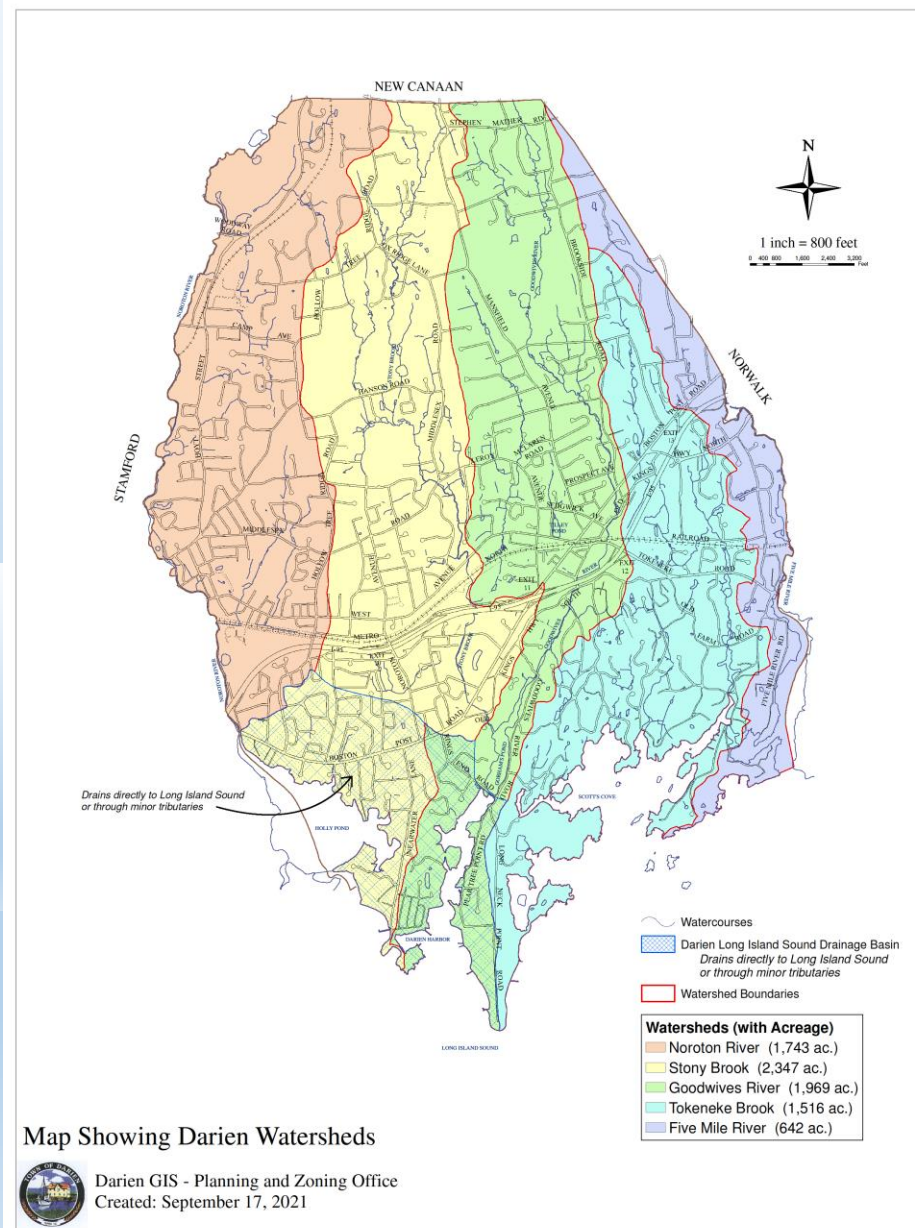
About 300-350 properties have had engineered-designed on-site drainage systems in the past 12 years.

Darien Zoning Regulations

Appendix B—Technical Review Fees

- Adopted these regulations circa 2007.
- Requires that applicants must pay for an outside technical review, at their expense, of any application going before a land use board.
- Thus, all engineering proposals are “double checked” to ensure that the new (usually replacement) house meets the regulations.
- Any new house construction that does not get formally reviewed by a land use board has their double check of drainage/stormwater management done by Darien DPW engineer.

3. Darien's Watersheds



4. Flood Mitigation Committee

Craig Flaherty

5. Noroton Heights Train Station Parking Lot project

Edward Gentile, PE

6. Summary

- Recent storms have been greater than experienced before—with the September 1 & 2 storm getting the most rain (possibly as far back as 1955).
- The September 1 & 2 storm was a 200/500 year storm based upon volume and time...large amount of rain in a short duration.
- Existing drainage structures and infrastructure is not designed to handle this magnitude.
- Role of private property owners for work on private property.
- Importance of repairing/rebuilding to minimize future flood impacts (ie. lifting houses or reconstructing at higher elevations).

Questions