



Land Use Academy

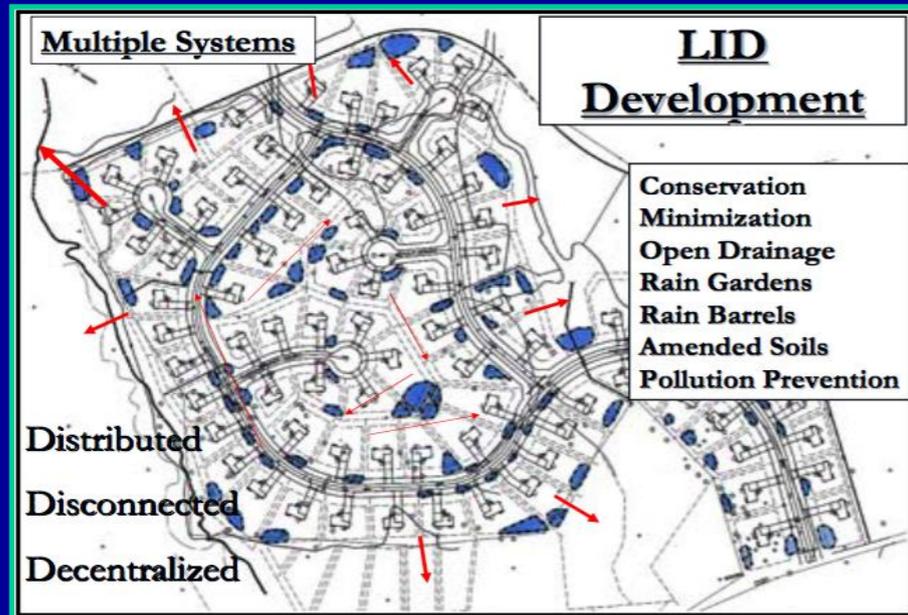
Center for Land Use Education and Research

CLEAR provides information, education and assistance to land use decision makers on how better to protect natural resources while accommodating economic growth.



Low Impact Development

Legal Foundation for Connecticut Land Use Boards



Bruce Hyde

University of Connecticut
Department of Extension

New Canaan – March 24, 2011



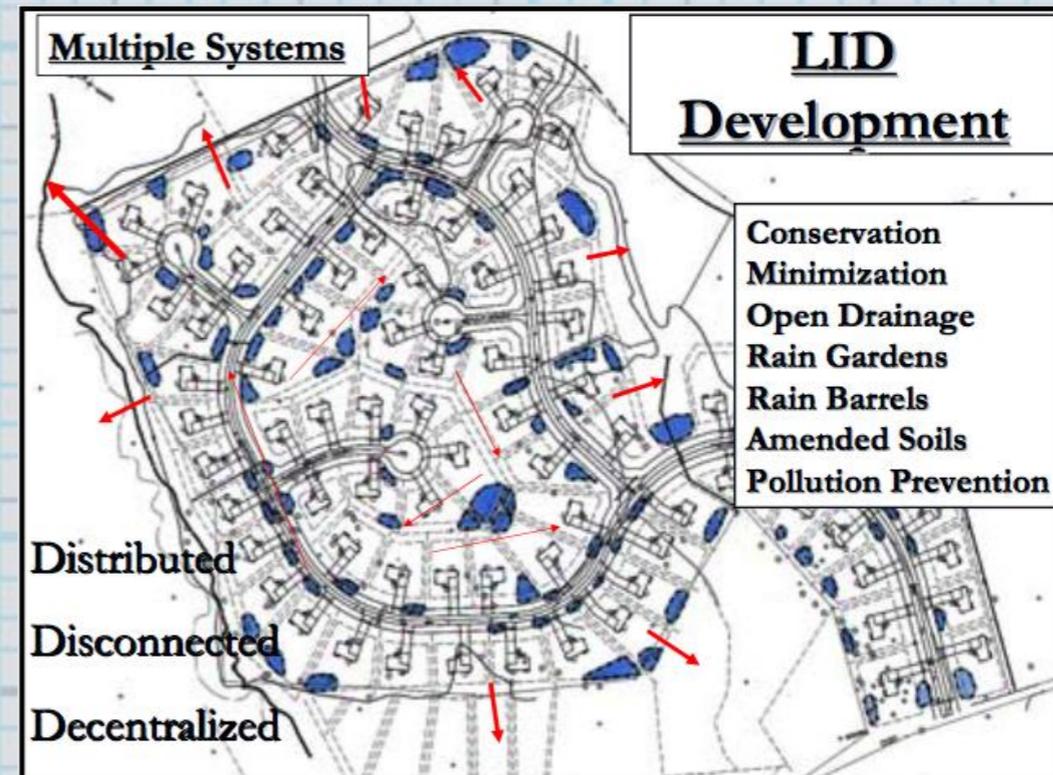
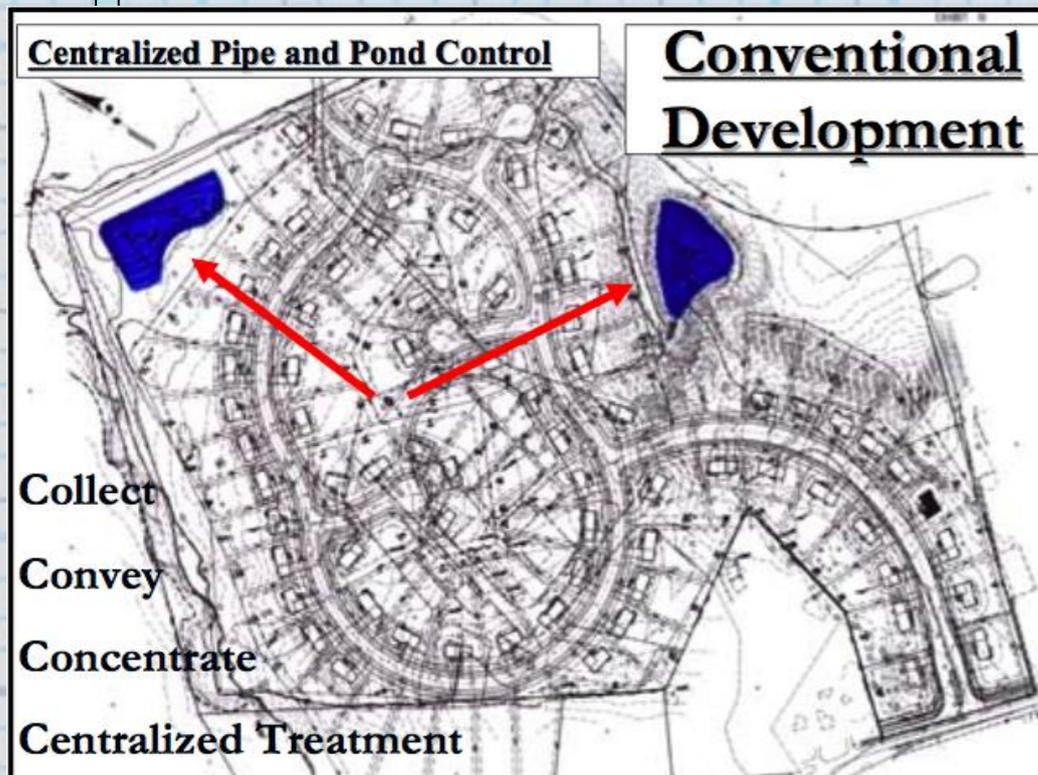
Low Impact Development



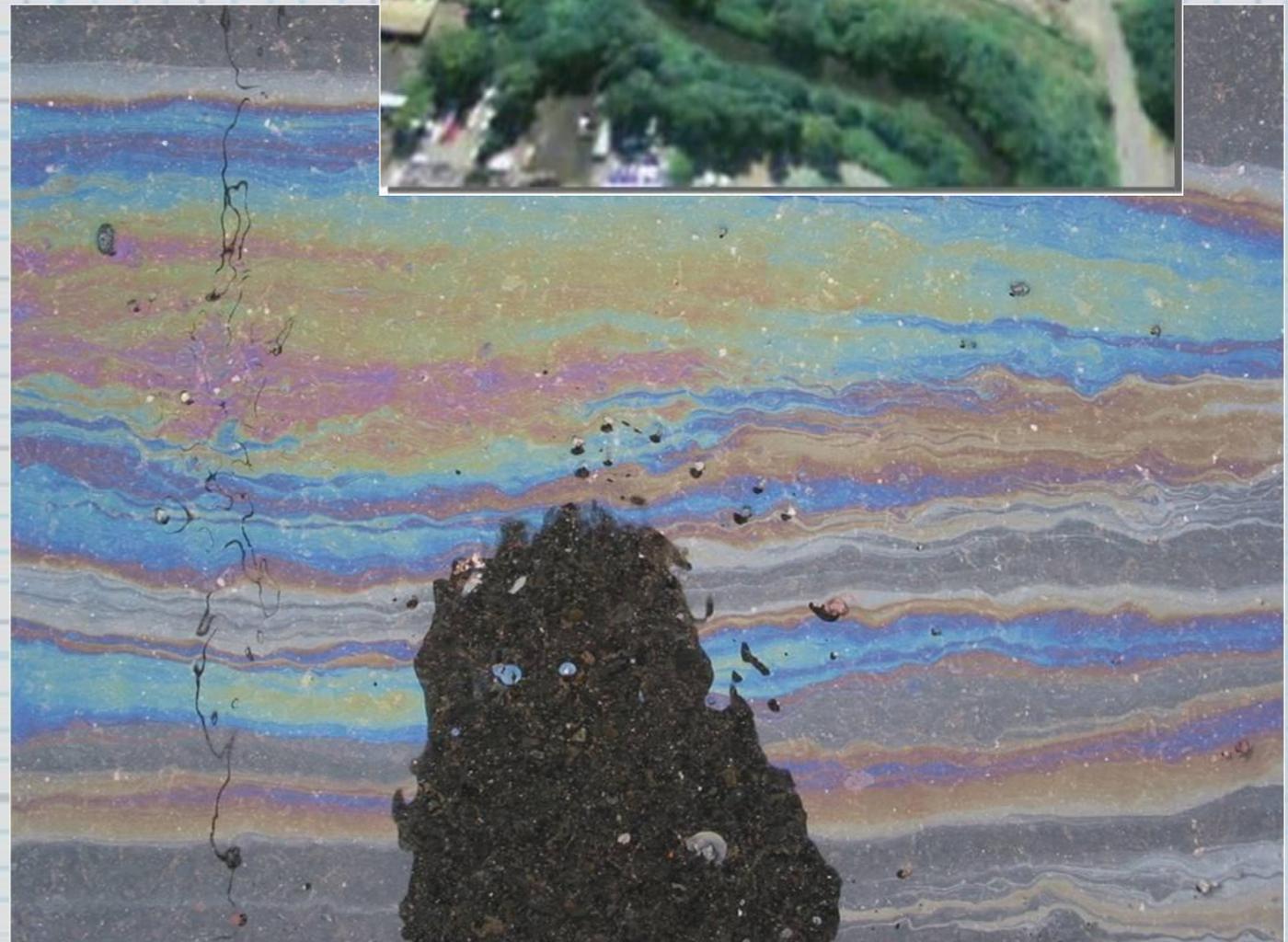
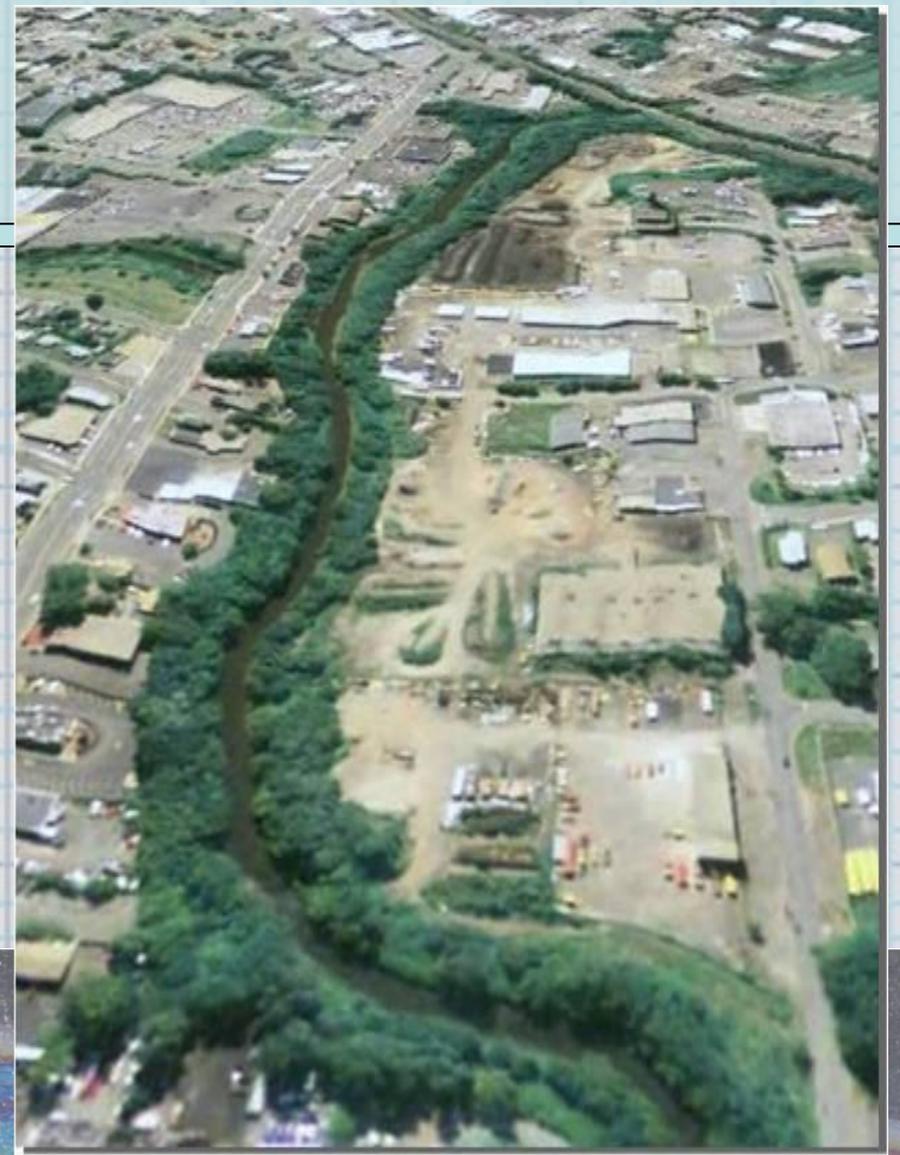
What is LID?

» A **site design** strategy intended to maintain or replicate predevelopment hydrology through the use of **small-scale controls** integrated throughout the site to manage runoff **as close to its source as possible**.

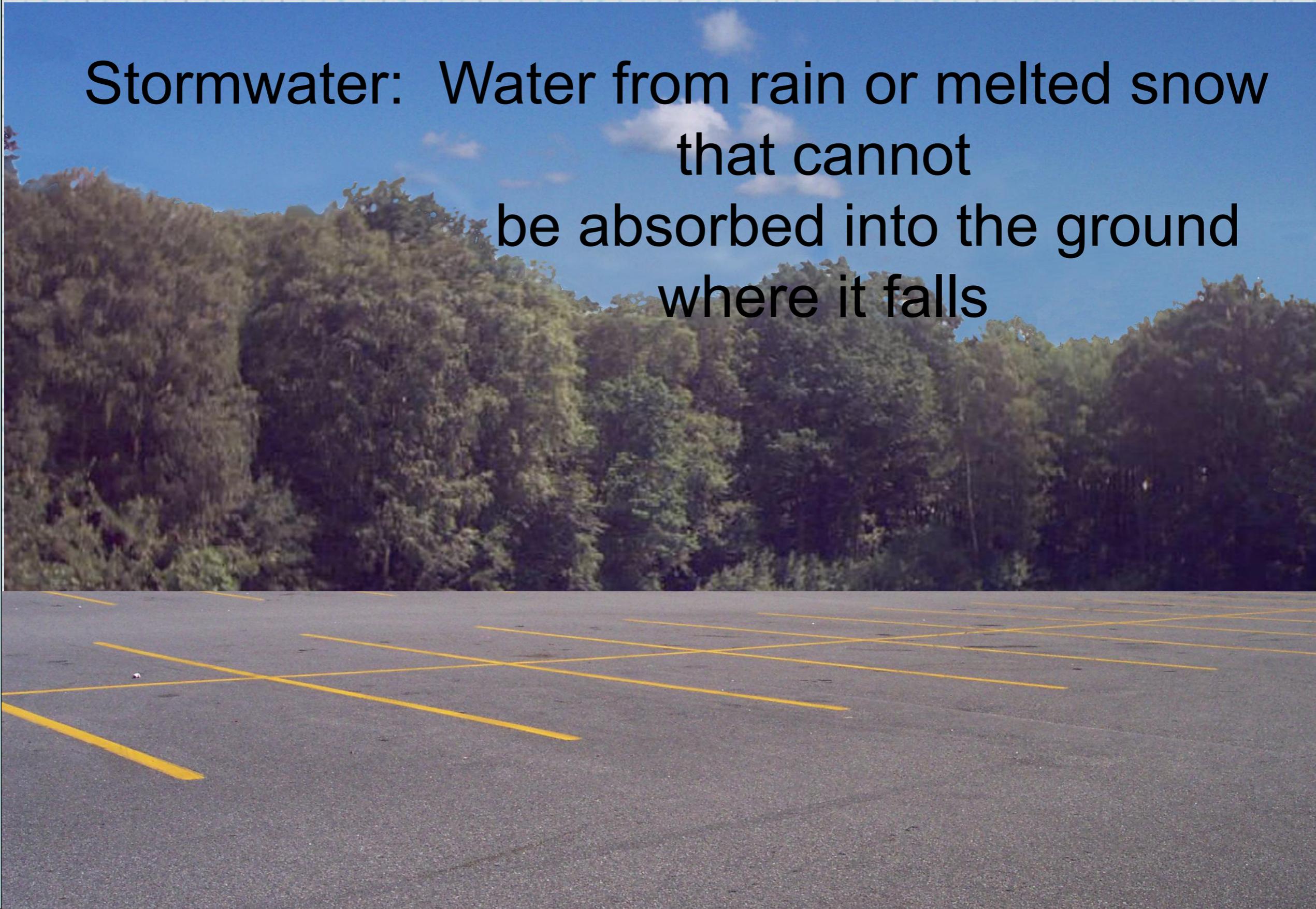
» *-CT Stormwater Quality Manual*



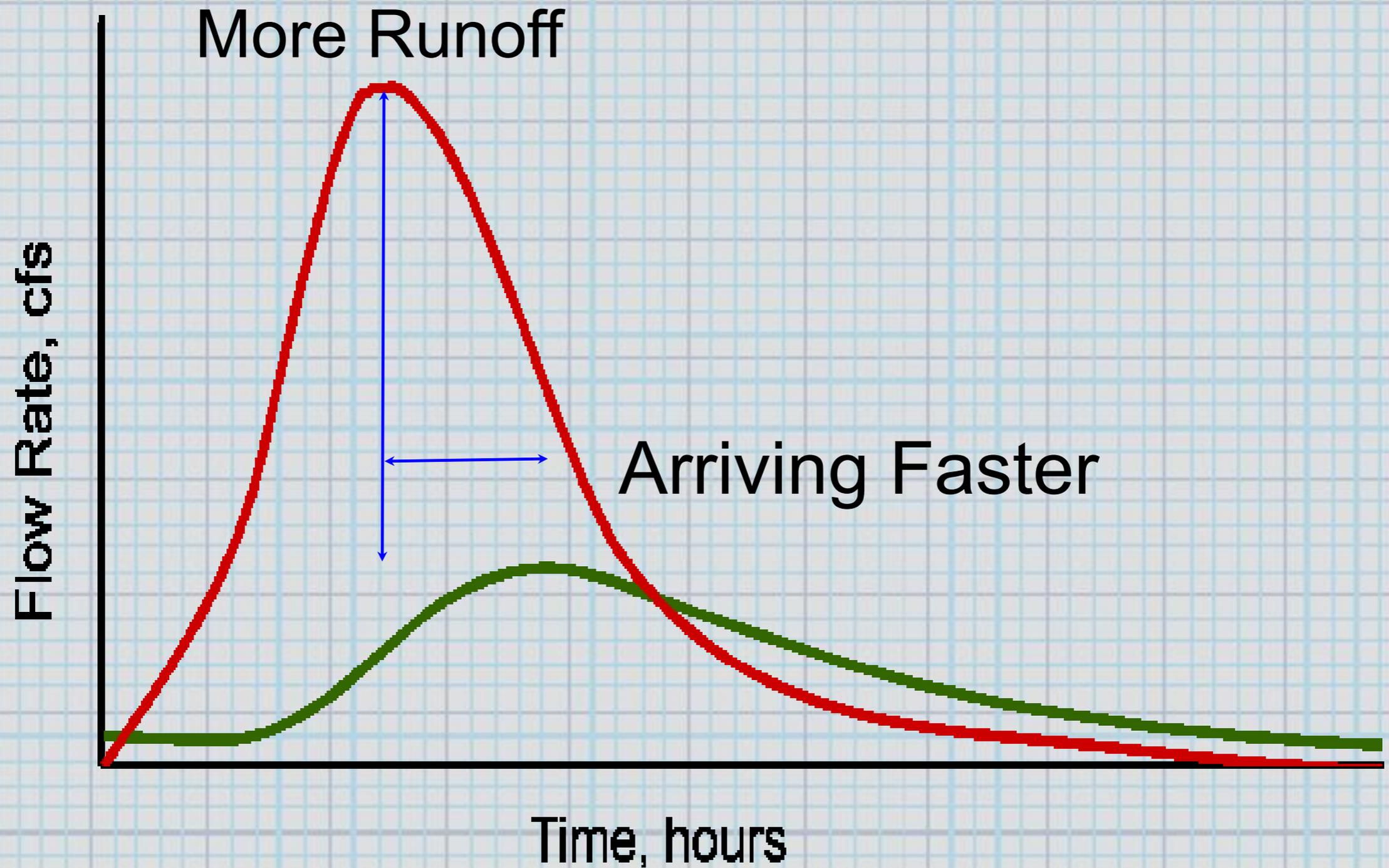
Stormwater runoff from impervious surfaces is one of the biggest causes of surface water quality degradation.



Stormwater: Water from rain or melted snow that cannot be absorbed into the ground where it falls



Run-off Comparison



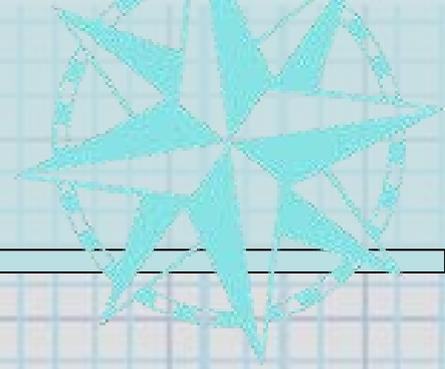
A better approach to stormwater management



The strategy includes:

- (1) reducing impervious cover (IC) where practical*
- (2) disconnecting IC from the surface waterbody*
- (3) minimizing additional disturbance to maintain existing natural buffering capacity*
- (4) installing engineered BMPs to reduce the impact of IC on receiving water hydrology and water quality.*

1. *reducing IC where practical*



- New construction
- Redevelopment



L&M Medical Office, Old Saybrook



Jordan Cove, Waterford

2. Disconnect IC from the waterbody



- Roofs



- Parking lots



- Roads`



3. minimize additional disturbance to maintain existing natural buffering capacity



- **cluster design**
- **zoning regulations on clearing of site**
- **stream and wetland buffers**



Riparian Buffers

- a “green corridor” along streams, lakes and shorelines
- protects water bodies from development impacts
- research shows buffers can mitigate the effect of impervious surfaces up to about 15% IC*
- many benefits beyond water quality





4. install engineered stormwater practices to reduce the impact of IC on receiving water hydrology and water quality



4. Install engineered BMPs (LID)

- Vegetated Swales, Buffers, and Filter Strips
- Bioretention/Rain Gardens
- Permeable/Porous Pavements
- Rainwater Harvesting
- Vegetated Roof Covers



Low Impact Development Practices

- **Vegetated Swales, Buffers, and Filter**



Low Impact Development Practices

- Bioretention/Rain Gardens



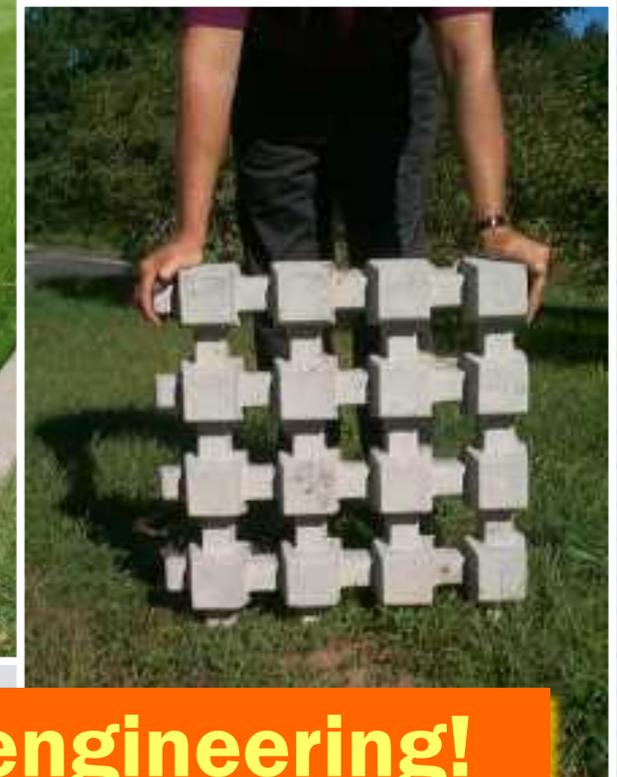
Rain Garden, Glen Brook Green,
Waterford, CT



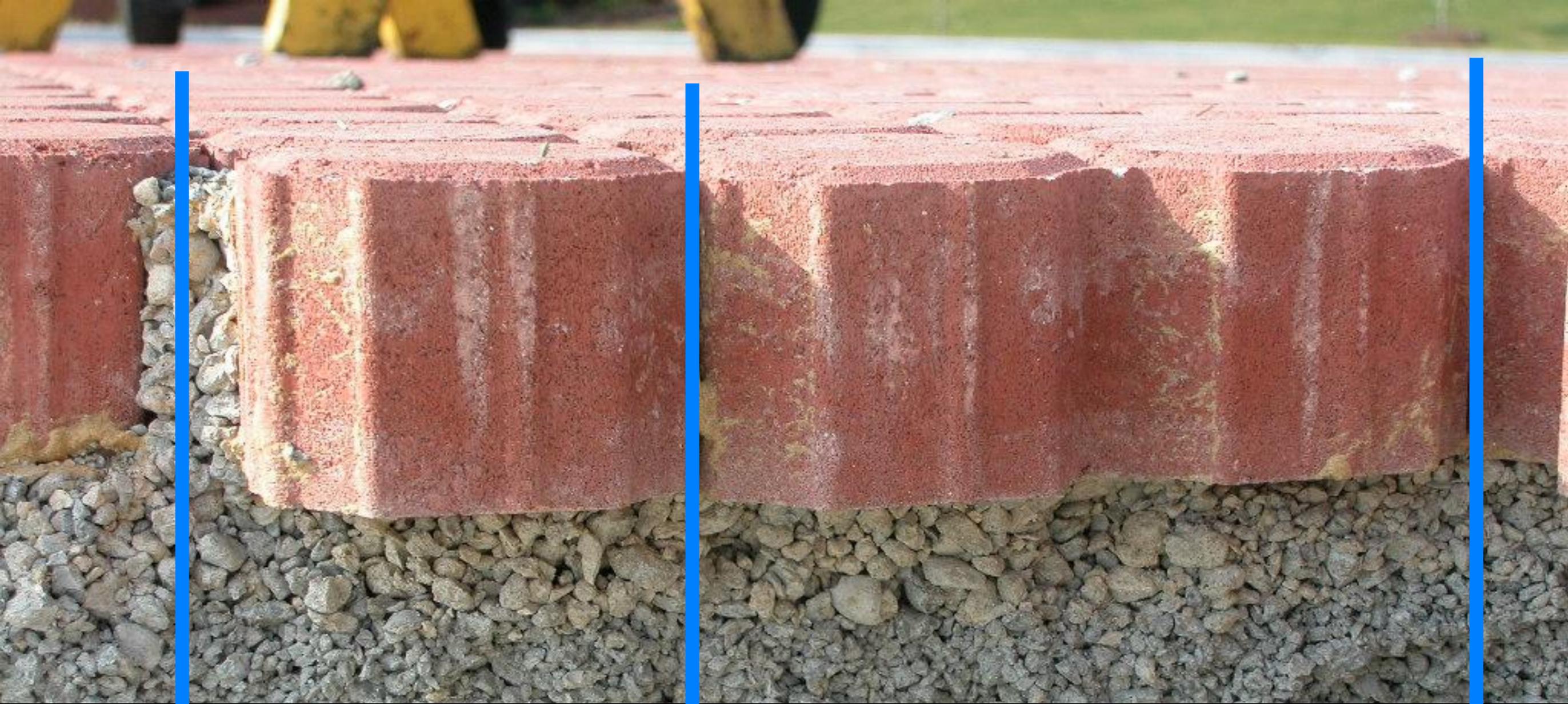
Rain Garden, Suburban Maryland

Alternatives to Pavement

Not less engineering...



...different engineering!

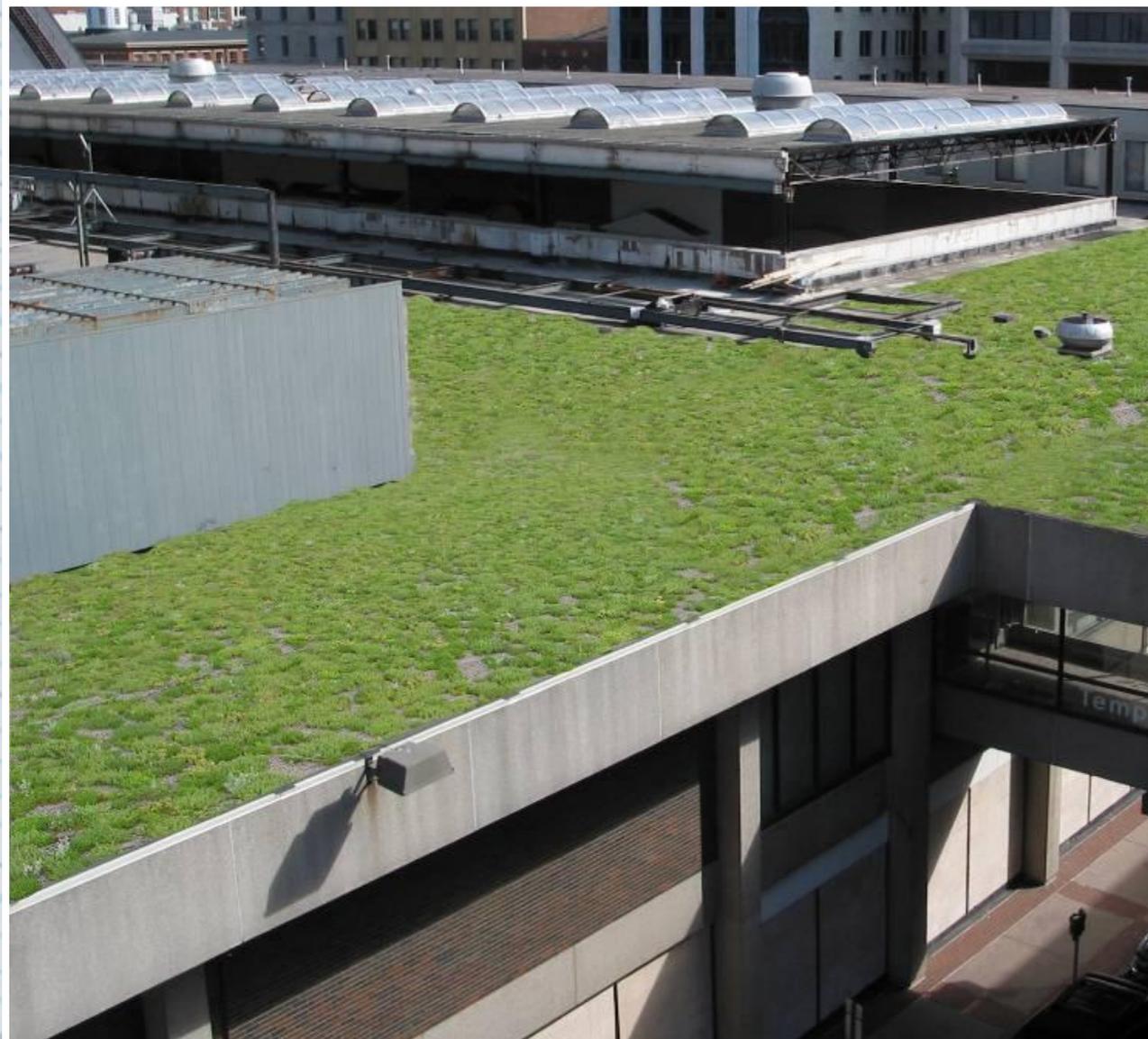




New London

Industrial/Commercial Roofs

Green roofs are common in Europe and gaining ground in the U.S.





Centerbrook Architects, Centerbrook, CT



Jordan Cove Research & Demonstration Project

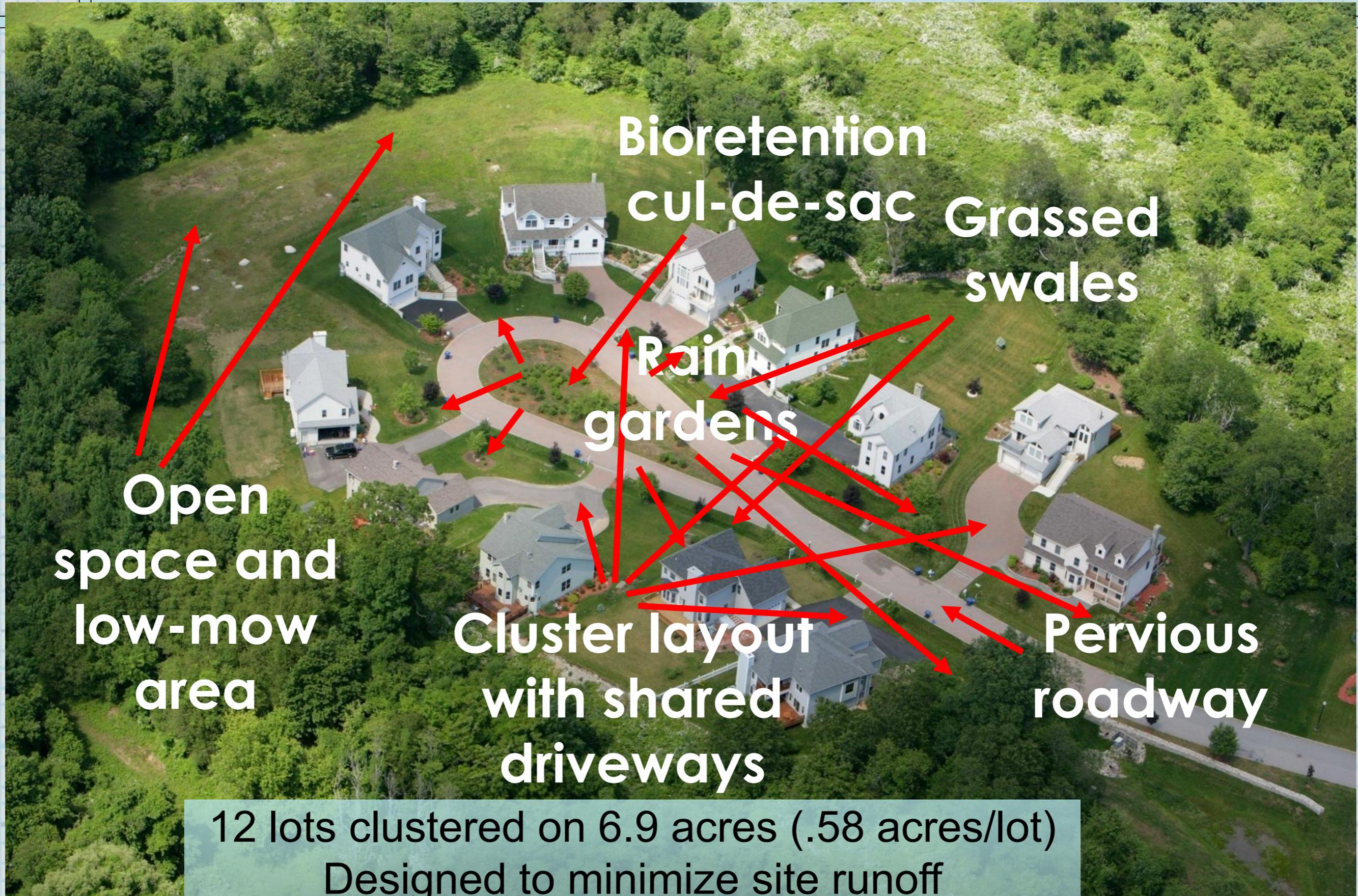


Conventional subdivision



- 17 residential lots on 10.6 acres (.62 acres/lot)
- Built using traditional zoning and construction practices
 - 28' wide asphalt road with curbs and drains
 - Traditional erosion and sediment control

Jordan Cove LID Neighborhood, Waterford, CT



Open space and low-mow area

Bioretention cul-de-sac

Grassed swales

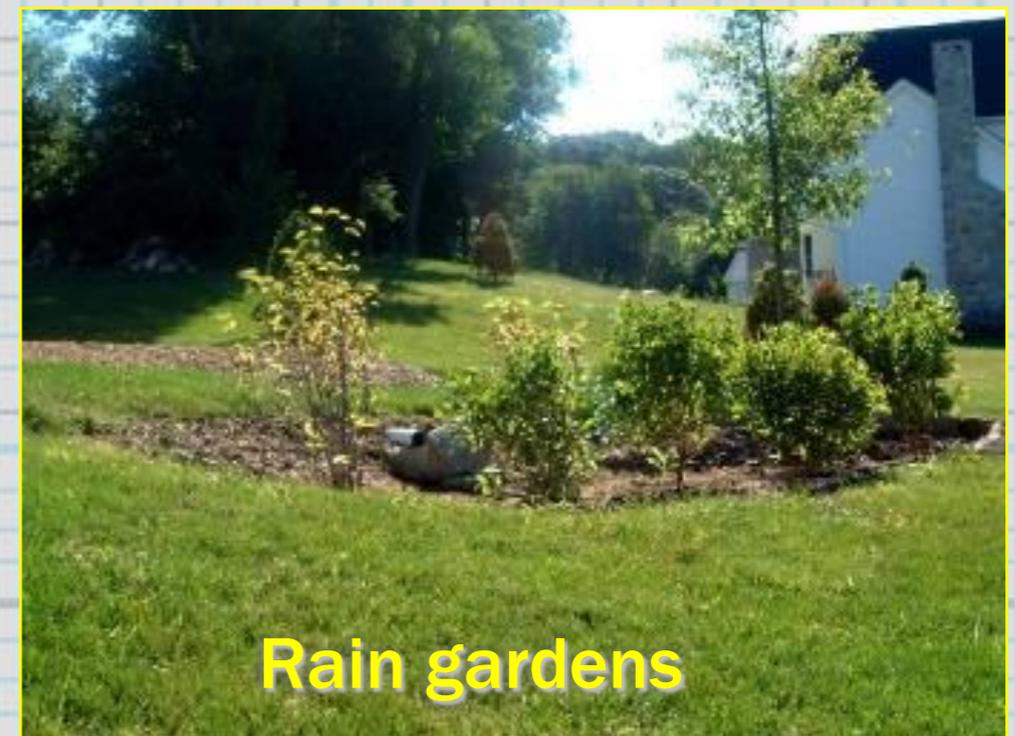
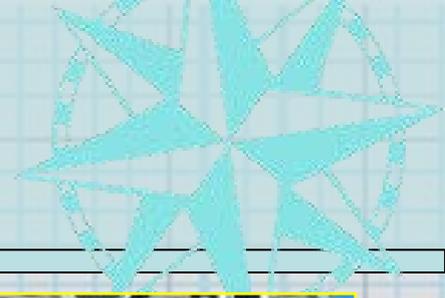
Rain gardens

Cluster layout with shared driveways

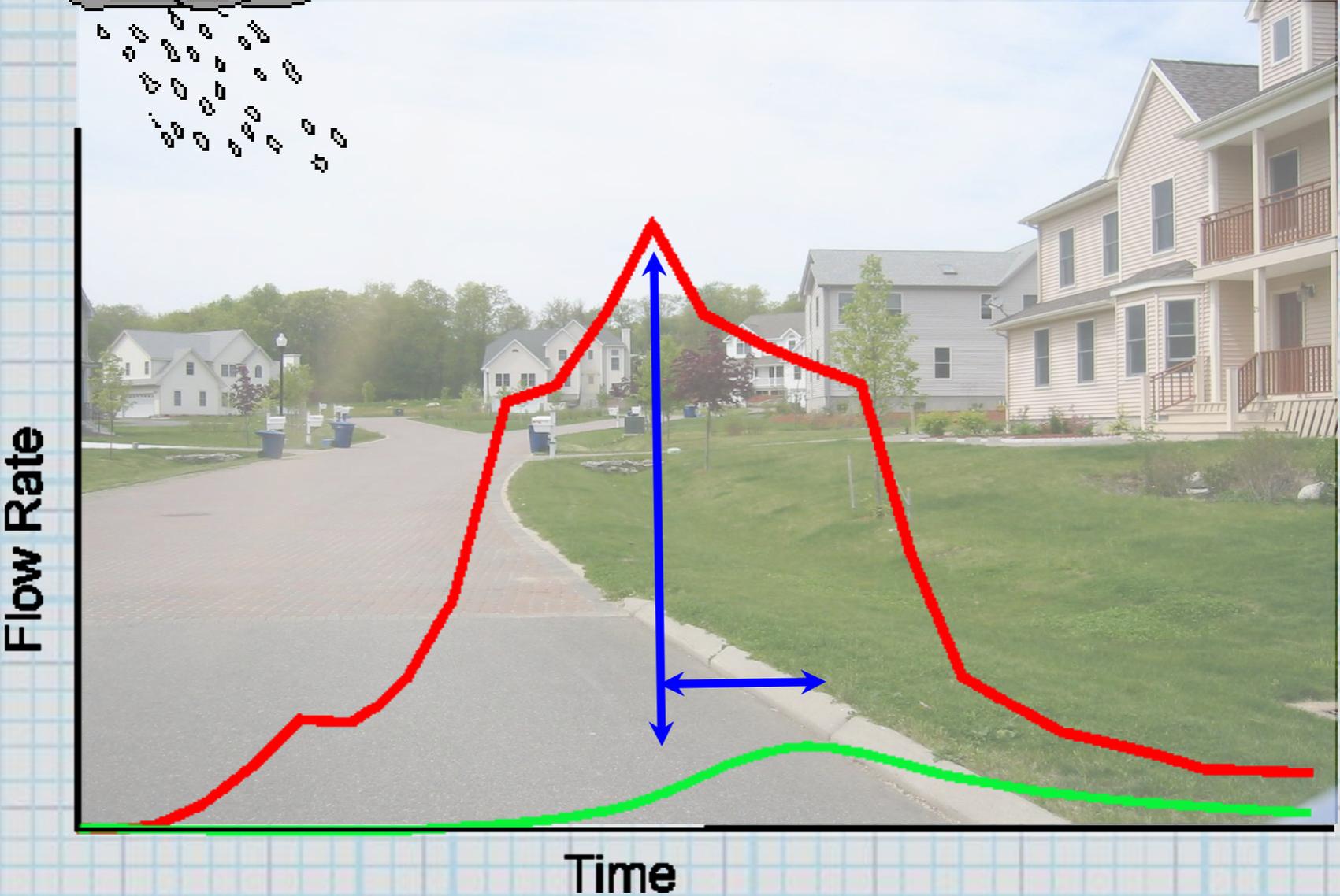
Pervious roadway

12 lots clustered on 6.9 acres (.58 acres/lot)
Designed to minimize site runoff

“LID Cluster” from the ground



But does it work?



More info on Jordan Cove

• <http://www.jordancove.uconn.edu>

Welcome to the Jordan Cove Urban Watershed Section 319 National Monitoring Program Project, located in Waterford, Connecticut.

This website highlights the project's background, has detailed descriptions of the low impact development practices used, lists technical and non-technical results and shows interviews from various project participants.

[Overview](#) [Timeline](#) [BMP Tour](#) [Results](#) [Testimonials](#) [Photo Gallery](#)

Publications
Contacts

University of Connecticut

CONNECTICUT DEPARTMENT OF ENVIRONMENT & ENERGY
UNITED STATES ENVIRONMENTAL AGENCY

This project is partially funded by the CT DEP through a US EPA,

TOWN OF TOLLAND

DESIGN MANUAL

LOW IMPACT DEVELOPMENT STORM WATER TREATMENT SYSTEMS PERFORMANCE REQUIREMENTS ROAD DESIGN STORMWATER MANAGEMENT

Adopted January 28, 2008

Effective February 1, 2008

Prepared by
Steven D. Trinkaus, P.E., CPE SC, CPSWQ
Trinkaus Engineering, LLC
114 Hunters Ridge Road
Southbury, Connecticut 06488
203-264-4558
E-mail: strinkaus@earthlink.net

Who's involved in LID from the town?

- Town Administration
- Planning and Zoning Commission
- Planning and Zoning Staff
- Town Engineer
- Public Works Department
- Fire Department



The National LID Atlas

A compendium of Low Impact Development sites. NEMO's National low impact development (LID) Atlas is an online resource providing geo-referenced examples on innovative stormwater management practices across the country. [LEARN MORE](#)



Riparian Corridors Study
Land cover change along CT's streams



Impervious Cover TMDL
The first "IC-TMDL" in the nation. Now what?



Ag Fields & Soils Study
Land cover change over CT's best agricultural soils.



The National LID Atlas
A compendium of Low Impact Development sites.

CLEAR provides information, education and assistance to Connecticut's land use decision makers, community organizations and citizens on how to better protect natural resources while accommodating economic growth. [Read More](#)



OUTREACH

[Educating Connecticut](#)

[CT NEMO](#)

[National NEMO Network](#)

A national network of NEMO programs that educate land decision-makers about the links between land use and natural resource protection.



[more](#)

[Land Use Academy](#)

[Geospatial Training](#)

[Forestry](#)

[Green Valley Institute](#)

POPULAR SITES

[Statewide Riparian Corridors Analysis](#)

[Impervious Cover TMDL](#)

[Agricultural Fields and Soils Analysis](#)

[Connecticut's Changing Landscape](#)

[Low Impact Development Atlas](#)

[Forest Fragmentation Study](#)

[CT Environmental Conditions Online \(CT ECO\)](#)

[Community Resource Inventory](#)

[CLEAR's Research Lab](#)

LERIS

LERIS is the main research program of CLEAR, and the principal place at the University of Connecticut for conducting remote sensing and GIS

EVENTS & INFORMATION

[CLEAR Calendar](#)

[2011 CLEAR Webinar Series](#)

All webinars are FREE.

February 8 - Riparian Corridors - read abstract

March 15 - Affordable Housing - read abstract

April 19 - Rain Gardens - read abstract

[View full schedule](#)

[Geospatial Training Courses](#)

March 30-April 1 & June 22-24
Geospatial Technologies at Work: An Introduction to GIS

June 9-10 & July 28-29
Pictures, Points & Places: An Introduction to GPS

May 24 & July 12
Mashup Madness: Using Google Tools to Create Maps on the Web



Search

National Low Impact Development (LID) Atlas

Login About This Site Contact Us

Filter Projects

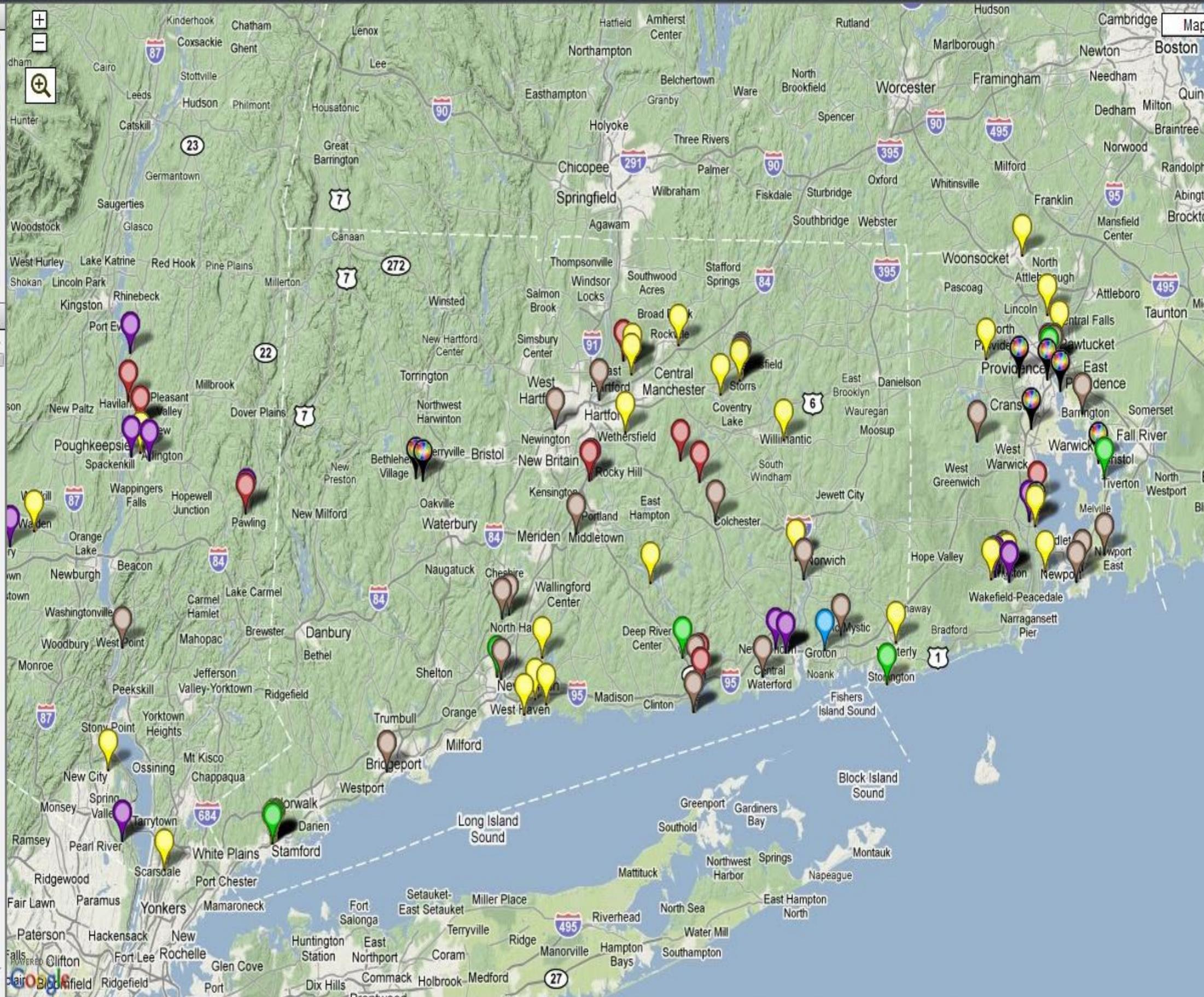
- All Projects 548
- Bioswale 105
- Bioretention/Rain Garden 244
- Cistern/Rain Barrel 60
- Stormwater Wetlands 56
- Green Roof 61
- Permeable Pavement 145
- Water Conservation 49
- Other 51

State: All States

Land Use Type: All Types

Currently Showing (548 Projects)

- Dennis L. Hansen's House
Duluth, MN
- 1750 gallon residential rain barrel sys
Duluth, MN
- Applebee's bioretention
Superior, WI
- Arrowhead Electric Cooperative
Lutsen, MN
- Asbury United Methodist
Duluth, MN
- Bagley Nature Center Green Roof
Duluth, MN
- Best Western Bioretention pond
Grand Marais, MN
- Clyde Avenue Boat Launch Bioswale
Duluth, MN
- Cook Co courthouse
Grand Marais, MN
- Cook County Check Dams
Grand Marais, MN
- Cook County Library Rain Garden
Grand Marais, MN
- Diamond Vogel Paint Store
Duluth, MN
- Dollar Days Bioswale
Superior, WI
- East Ridge Development
Duluth, MN
- Eastridge Community church
Duluth, MN



Legal Foundation for Connecticut Land Use Boards



On what commission do you serve?

- A. Planning and Zoning**
- B. ZBA**
- C. Inland Wetlands and Watercourses**
- D. Conservation**
- E. Economic Development**
- F. None**

How long have you served?

A. Less than 2 year

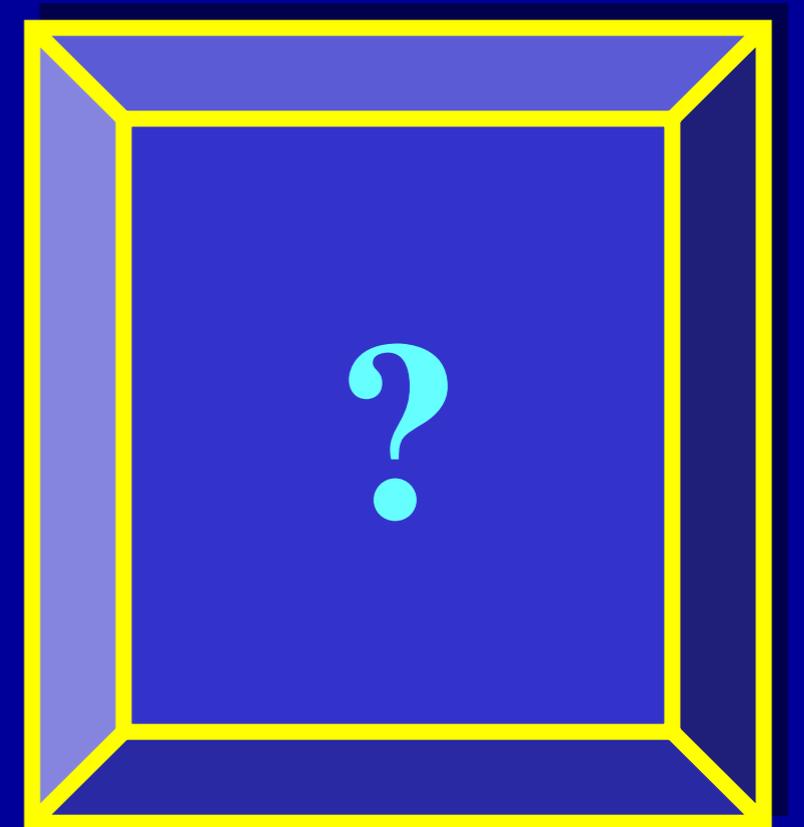
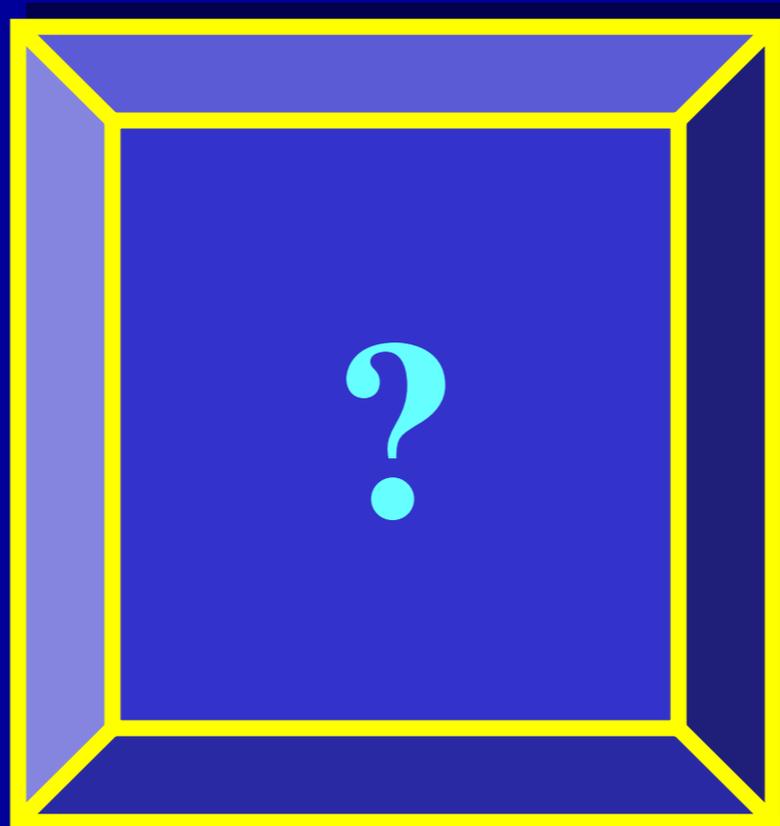
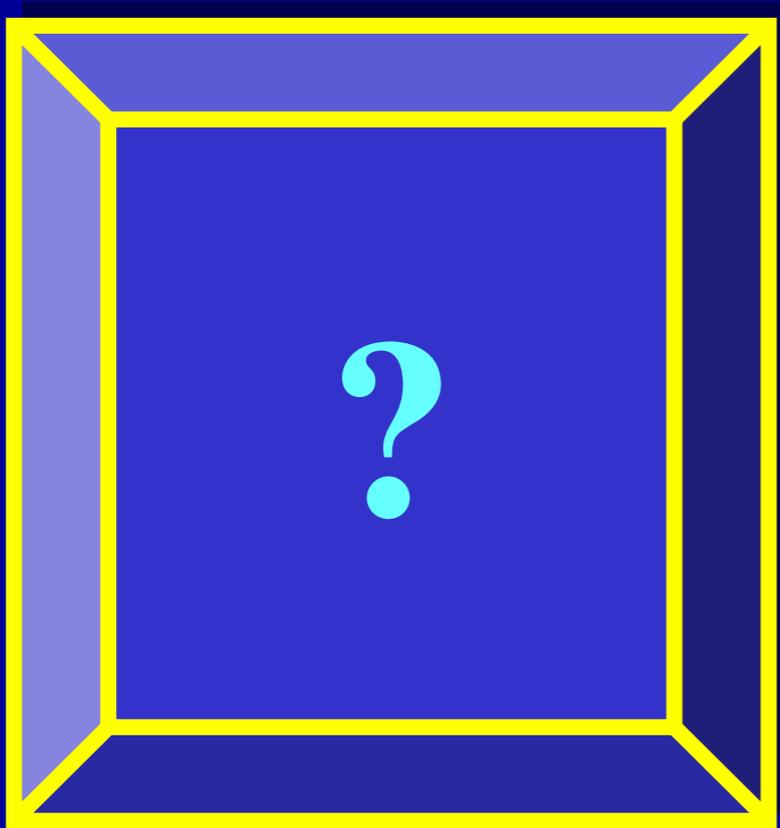
B. 2-4 years

C. 5-10 years

**D. More than 10
years**

E. n/a

Legal Basis for Local Land Use Regulations

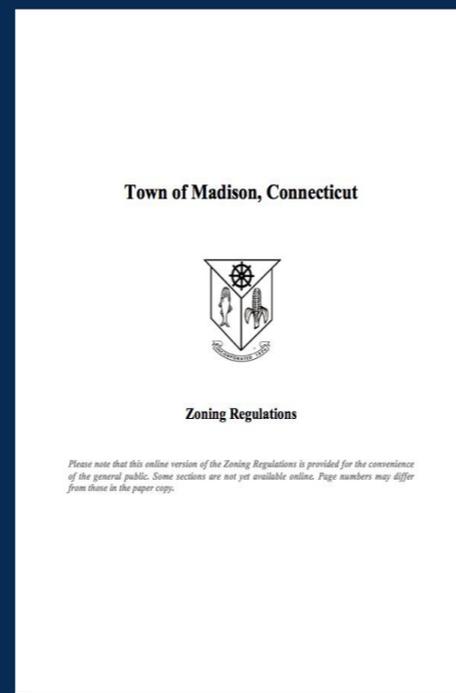


Which of the following provides the legal basis for a local commission's land use authority?

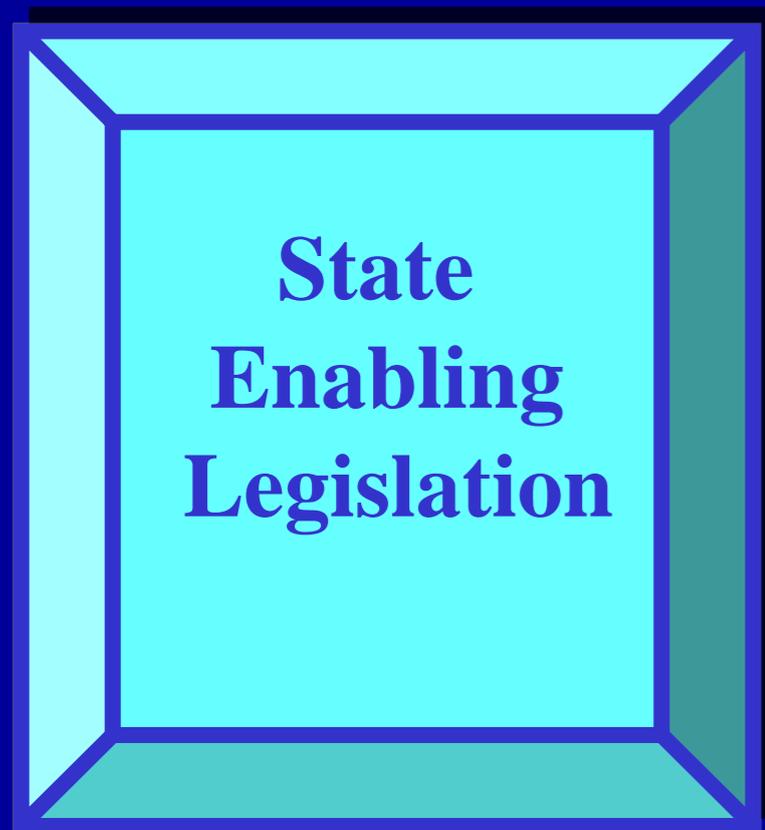
- A. Legislation through state statutes**
- B. A vote of the City Council/Board of Selectmen**
- C. Court decisions**
- D. Duly adopted local regulations**
- E. Public opinion**

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Legal Basis for Local Land Use Regulations



Legal Basis of Land Use Regulation

1. State Enabling Legislation

Provides Foundation and Limits of Powers

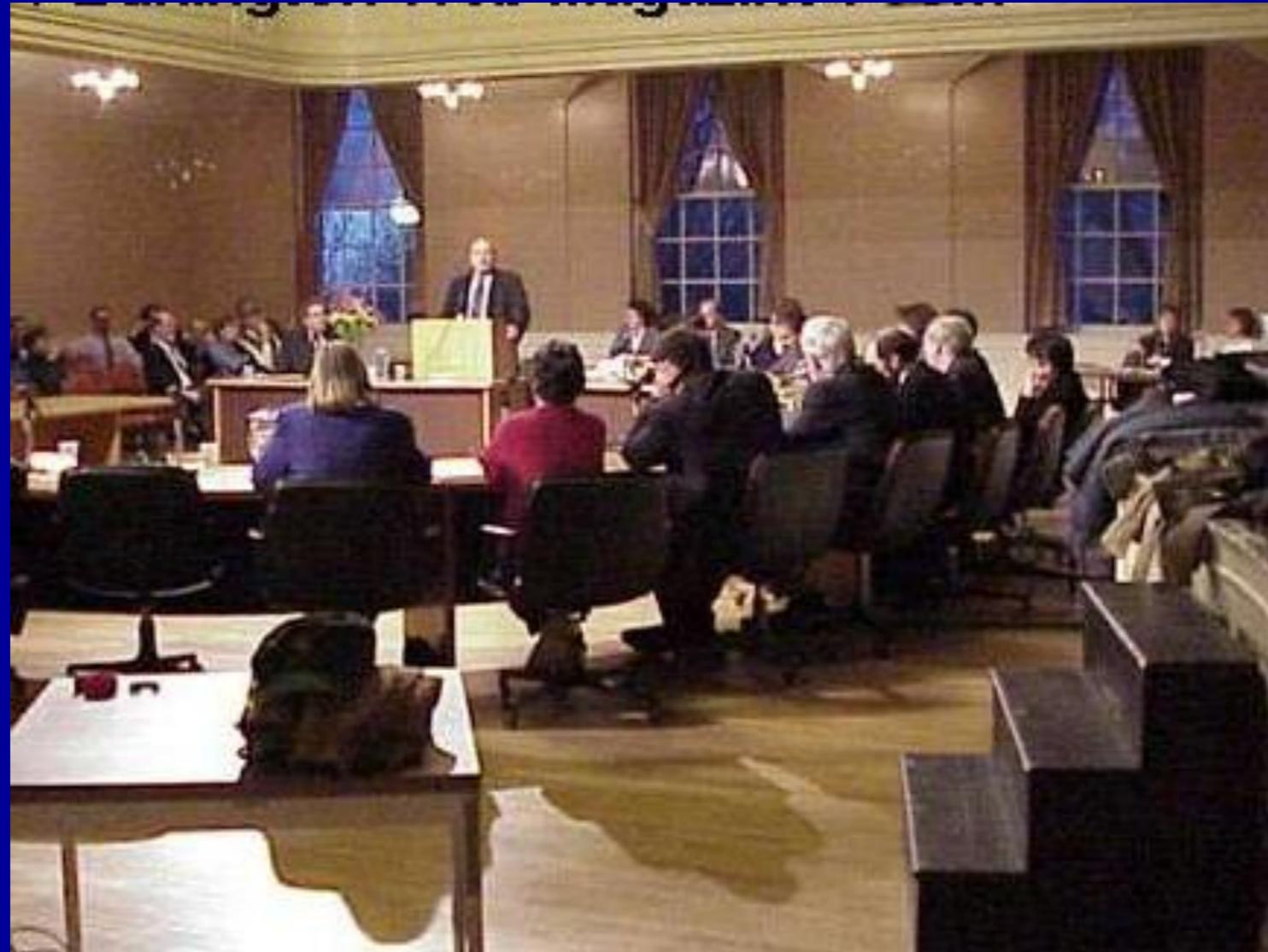
Ability of a municipality to regulate land use is both derived from and limited by statutes

Municipalities have no inherent power to regulate land use,

That power rests with the States in the form of, “Police Power”



Police Power = The right or need of government to protect the public health, safety and welfare



Basis of all land use regulation and all sections of the regulations must achieve this end

Connecticut General Statutes – Land Use

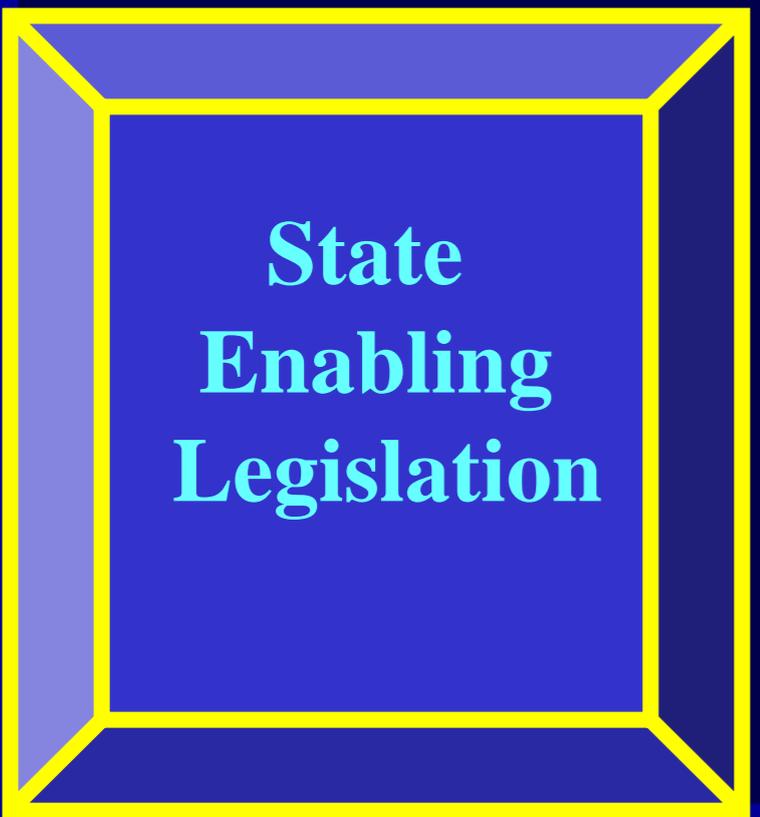
Zoning Title 8, Chapter 124, Sections 8-1 through 8-3

Planning Title 8, Chapter 126, Sections 8-18 to 8-30

Wetlands Title 22a, Chapter 440, Sections 22a-36 to 22a-45



Legal Basis for Local Land Use Regulations



**State
Enabling
Legislation**



**Court
Decisions**



**Local
Regulations**

Legal Basis of Land Use Regulation

2. Court Decisions

Provide legal review and interpretation



Federal Level

Constitutional foundation for all American zoning was established in a 1926 Supreme Court decision that upheld a zoning ordinance enacted by the Village of Euclid, Ohio

VILLAGE OF EUCLID, OHIO vs. AMBLER REALTY

1926 U.S. Supreme Court Upholds Right to Zone

Euclid vs. Ambler

Ambler bought 68 acres to develop as industry.
Village zoned land for residential use only



- Ambler charged an unconstitutional violation of due process in that it was a taking without just compensation
- Also claimed financial loss due to restrictive zoning

Supreme Court Ruled:

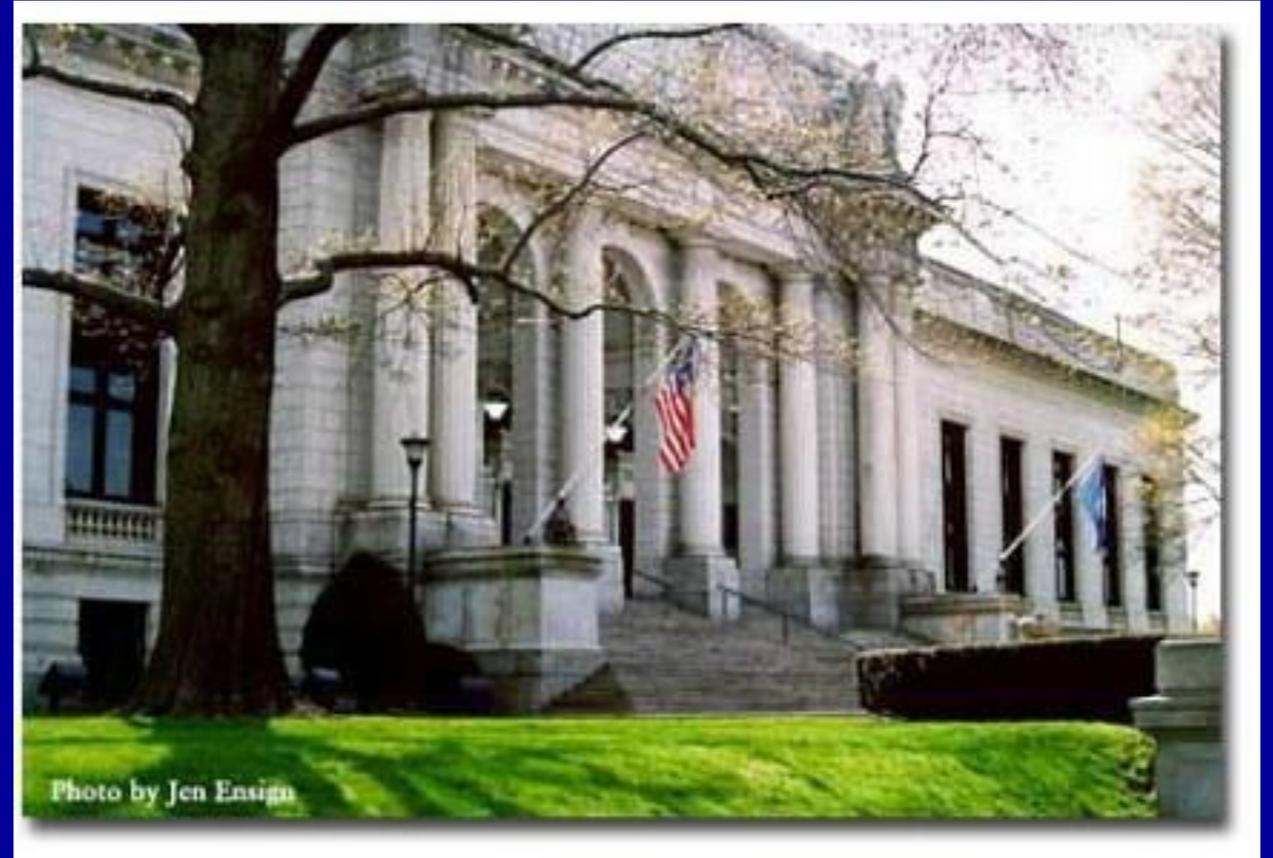
- Not a taking as Ambler could make use of the land, (not the use they wanted)*
- Zoning's purpose is to protect public health, safety and welfare not personal financial gain*
- Village can establish districts and exclude certain uses from certain districts*

Legal Basis of Land Use Regulation

2. Court Decisions

Provide legal review
and interpretation

State Level



- Courts provide local land use officials wide & liberal discretion
- Feel local officials best suited to make local land use decisions
- Courts will not interfere in local matters unless commissions act "illegally....."

Legal Basis of Land Use Regulation

2. Court Decisions

Provide legal review
and interpretation

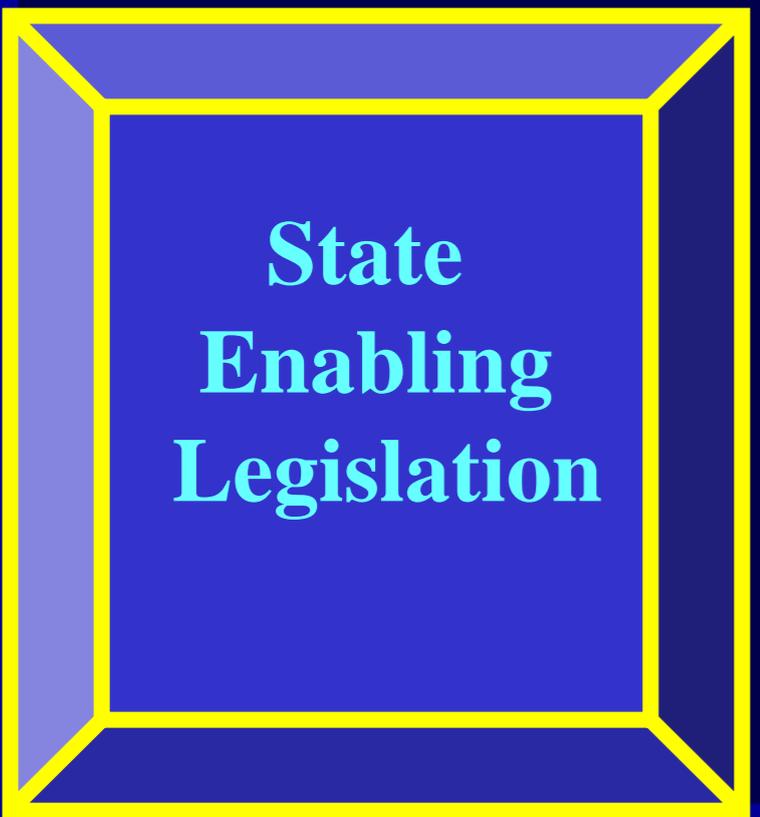
State Level

Illegal commission acts:

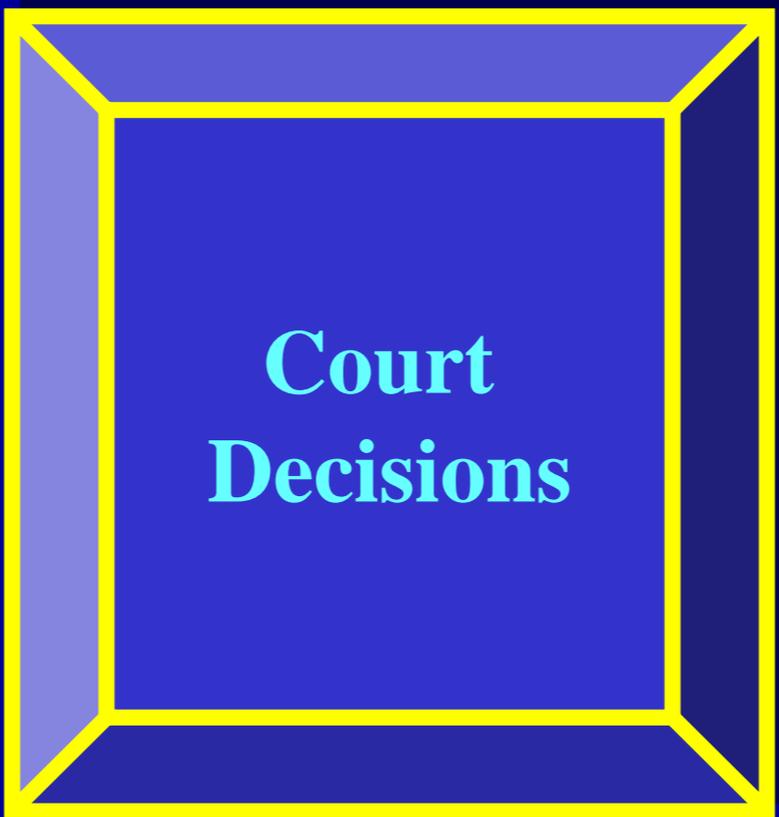
1. Failure to follow procedures set forth
in the State Statutes
2. “Clear breach of duty” – acting in an
arbitrary or capricious manner
arbitrary = at random, unreasonable
capricious = acting impulsively



Legal Basis for Local Land Use Regulations



**State
Enabling
Legislation**



**Court
Decisions**



**Local
Regulations**

Connecticut's Political Landscape

Local



*Home
Rule*



*169
Fiefdoms*



*Did away with county
government in the 50s
Land Use is Local*

Sources of Power---Under “home rule” municipalities have the right to regulate land use

A. True

B. False

10

Countdown
Timer
On Slide

Sources of Power--Under “home rule” municipalities have the right to regulate the use of the land.

Home rule is the power of a local city or county to set up its own system of self-government without receiving a charter from the state.

Source: USLegal.com

A. True

B. False

Commissions can only perform the functions that state enabling legislation allows them to.



The STATE will let you.....



State Government

Legal Basis of Land Use Regulation

3. Local Regulations

Ultimate Source of Land Use Control

Basic set of local land use regulations:

1. Zoning
2. Subdivision
3. Inland Wetlands



When drafting regulations, commissions serve in what capacity?

- A. Administrative**
- B. Police**
- C. Judicial**
- D. Legislative**
- E. Parliamentary**

15

Countdown
Timer
On Slide

When drafting regulations, commissions serve in what capacity?

- a) Administrative
- b) Police
- c) Judicial
- d) Legislative**
- e) Parliamentary



Types of Power-Legislative

When writing regulations a commission is acting in a legislative capacity

- **Courts allow wide discretion**
- **Must be consistent with legislative purposes set forth in CGS.**

Types of Power-Administrative

When reviewing development applications a commission is acting in an administrative capacity

- **Discretion is more limited**
- **Must employ appropriate standards**

Types of Power- Quasi-Judicial

When hearing appeals, a commission is acting in a quasi-judicial capacity

- **Can reverse or affirm, wholly or in partly, or to modify the challenged order, requirement or decision.**
- **Must limit decision to issues actually raised in the appeal**

Types of Local Commissions

Regulatory

- Planning
- Zoning
- Zoning Board of Appeals
- Inland Wetlands and Watercourses
- Historic District



Nonregulatory

- Conservation
- Economic Development
- Design Review



Which of the following does the State of CT REQUIRE municipalities to have?

- A. Planning Commission**
- B. Zoning Commission**
- C. Zoning Board of Appeals**
- D. Inland Wetlands and Watercourses Agency**
- E. Conservation Commission**
- F. Everything but a Conservation Commission**

20

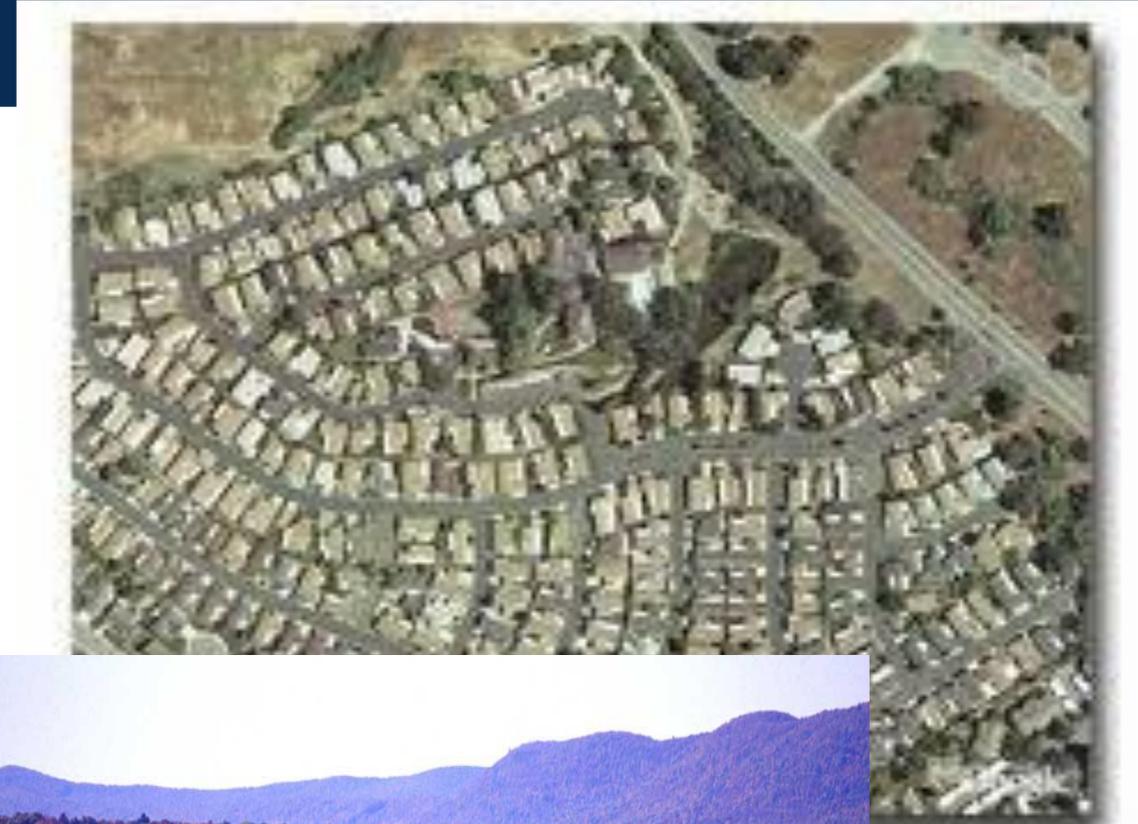
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Current Concerns-What some communities are concerned with

- **Smart Growth**
- **Affordable Housing**
- **Farmland Preservation**
- **Riparian Corridors**
- **TOD**
- **Low Impact Development**



4 things your staff wants you to know...

- 1) Always bring your tools (regs) with you.**
- 2) Take time to read the POCB and your regulations.**
- 3) Be thoughtful and courteous during a meetings. Remember your role.**
- 4) Know your jurisdiction.**



Sometimes there will be tough choices



HOME ABOUT CLEAR PUBLICATIONS NEWS CONTACT

University of Connecticut College of Agriculture & Natural Resources
Center for Land Use Education & Research

RESEARCH OUTREACH EDUCATION IMAGERY & DATA TOOLS

Research
Project Guide

Imagery & Data
Data Guide

Education
Program Guide

- NEMO Program
- National NEMO Network
- Land Use Academy
- Forestry
- Green Valley Institute
- Geospatial Technology Program
- Land Use Planning Program

TRAINING & EVENTS

WEBINAR - May 26 - Register Now!
Connecticut's Changing Landscape Project: A User's Guide & Cook's Tour

- basics of the project's remote sensing-based methods
- a brief description of the differences

Geospatial Training

- Intro to GPS 5/13 - 5/14
- Making Good Maps 6/12
- Intro to GPS 6/25 - 6/26

Click here for more information on the geospatial trainings.

Website: clear.uconn.edu



Review of select legal issues

Town of New Canaan

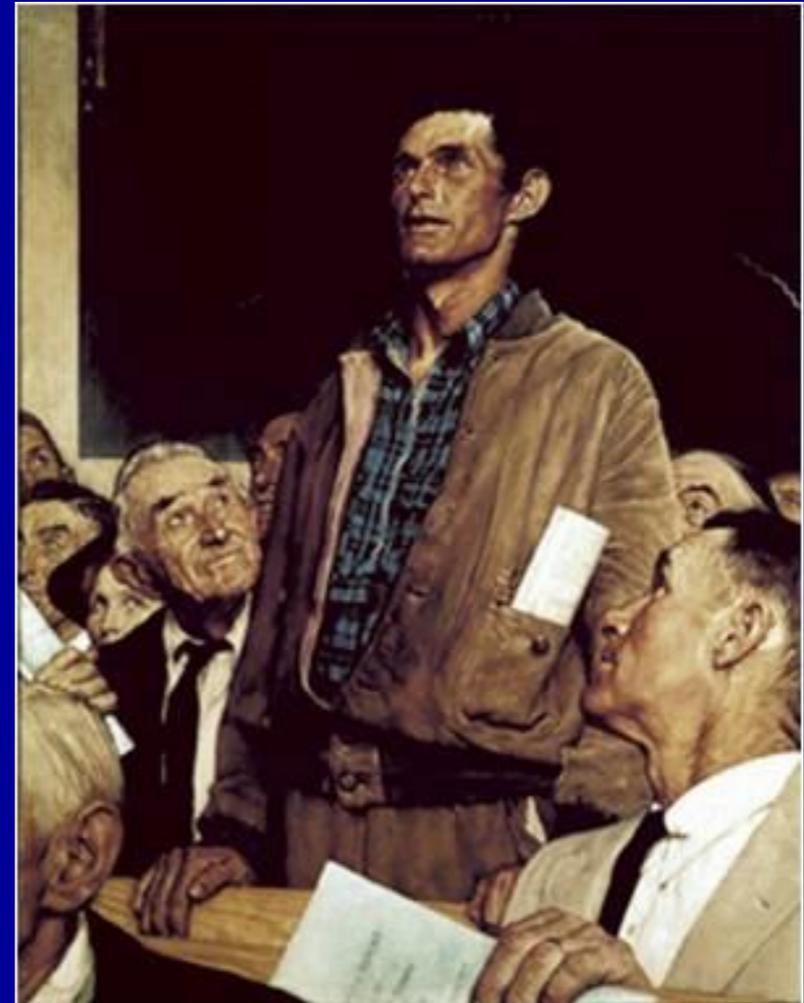
Atty. Christopher J. Jarboe



March 24, 2011

Legal Considerations- FOI

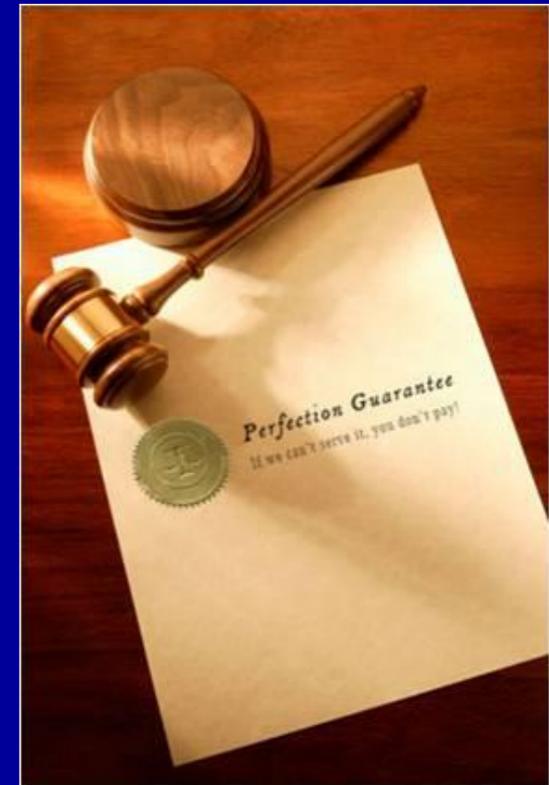
- “Public Meetings”
 - * definition in statute
- “Public Documents”
 - * definition in statute
 - * includes correspondence
 - * email chain warning



Legal and Procedural Considerations- Agendas and Notices

- Regular meetings

- * dates to be set each year before 1/31
- * agenda to be posted at least 24 hours in advance
- * identify items to be heard and considered
- * items may be added by 2/3 vote



Legal and Procedural Considerations- Agendas and Notices

- Special meetings
 - * at least 24 hours' notice to members
 - * at least 24 hours' advance posting
 - * only those items listed on agenda may be considered
- “Emergency” meetings
 - * very unusual circumstances
 - * rare for land use agencies

Case Study

Findlay v. New Canaan HDC

If not noticed as a public meeting under FOI, which of the following may constitute an illegal meeting of a commission?

- A. A chance social gathering of a quorum of the members**
- B. A planned meeting of a quorum of the commission members all from one political party**
- C. A planned meeting of a quorum of the commission members all from one political party and the mayor/first selectman**
- D. A quorum of the commission discussing a pending application while standing in the parking lot after a meeting**
- E. An email exchange among a quorum of the commission discussing a pending application**

30

Countdown
Timer
On Slide



If not noticed as a public meeting under FOI, which of the following may constitute an illegal meeting of a commission?

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- E. An email exchange among a quorum of the commission discussing a pending application**

Which of the following is a legally permissible reason to go into executive session?

- A. Discussion of a personnel matter**
- B. Discussion of an application that is very unpopular**
- C. Discussion of attorney-client privileged documents**
- D. Discussion of pending claims or litigation**
- E. Taking a straw poll of the members on a pending application**

20

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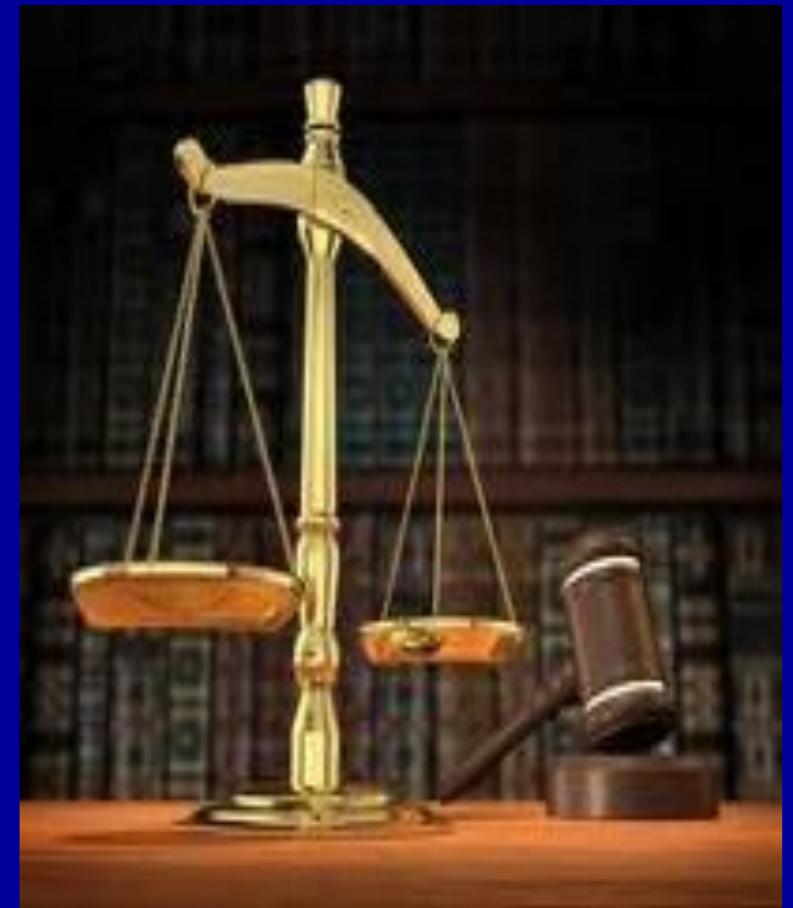
Zoning Commission-Appeals

- To court unless it is specifically stated the appeal is to the ZBA



Zoning Board of Appeals-Appeals of ZEO Decisions

- Any “order, requirement or decision” of the ZEO may be appealed.
- Order or decision is generally not stayed during appeal
- Time frame for filing
- de novo review
- Requires public hearing
- ZEO can't provide additional evidence after close of hearing



Zoning Board of Appeals-Variations

- Must be “in harmony with” purpose and intent of zoning regulations
- Must be “with due consideration for” public health, safety, welfare, property values
- Solely with respect to a given parcel where special conditions exist affecting such parcel, but not the district as a whole, “literal enforcement of the regulations would result in exceptional difficulty or unusual hardship”
- Variations run with the land, not with the owner



Case Studies

Randon v New Canaan ZBA

Beck v. New Canaan ZBA

Cooper v. Norwalk ZBA

Which of the following is recognized as a "hardship" for purposes of granting a variance?

- A. Expense**
- B. Preferences of the owner**
- C. The neighbors object**
- D. It would look better if granted**
- E. None of the above**

Which of the following is recognized as a "hardship" for purposes of granting a variance?

A. Expense

B. Preferences of the owner

C. The neighbors object

D. It would look better if granted

E. None of the above

Which of the following ZBA actions does NOT require four affirmative votes?

- A. Granting a variance**
- B. Overruling the order of the ZEO**
- C. Approving meeting minutes**
- D. Approving a special permit application**
- E. Motion to table an application**

Which of the following ZBA actions does not require four affirmative votes?

- A. Granting a variance**
- B. Overruling the order of the ZEO**
- C. Approving meeting minutes**
- D. Approving a special permit application**
- E. Motion to table an application**

When is a Hearing Required?

- A. When required by the statutes**
- B. When required by the regulations**
- C. When ordered by the City Council/Mayor**
- D. Settlement of Litigation**
- E. Whenever the Commission wants**

When is a Hearing Required?

- A. When required by the statutes**
- B. When required by the regulations**
- C. When ordered by the City Council/Mayor**
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Which of the following individuals may speak at a public hearing?

- A. The applicant**
- B. Neighbors opposed to an application**
- C. Residents of another town**
- D. Representatives of trade associations**
- E. Convicted felons**
- F. All of the above**

Which of the following individuals may speak at a public hearing?

- A. The applicant**
- B. Neighbors opposed to an application**
- C. Residents of another town**
- D. Representatives of trade associations**
- E. Convicted felons**
- F. All of the above**

Ex parte Communications

Legal and Procedural Considerations-Ex parte evidence

- Receipt and consideration
 - * should be avoided, if at all possible
- Staff and consultant reports
 - * limit to factual matters
 - * limit to issues raised and discussed during hearing
- Questions and comments during deliberations
 - * no new evidence
 - * no direct input from applicants or opposition



Case Studies

- Mulvey v. New Canaan Environmental Commission
 - Pirone v. New Canaan ZBA

Other Issues

Legal and Procedural Considerations-Pre application Conferences

- With the staff
 - * common, informal
 - * non-binding and advisory
- With the commission
 - * permitted by statute (CGS 7-159b)
 - * may want to include process in regulations
 - * non-binding



Legal and Procedural Considerations-Site Walks

- Special rules
- Must be noticed
- No comments or questions,
- take notes
- Public and applicants may attend



Bias, Predisposition and Conflicts

Fair Hearing

- A. Decorum
- B. Conflicts of Interest/Prejudgment
 - i. Conflicts of Interest
 - ii. Perceived or Potential Conflicts of Interest
 - iii. Prejudgment
 - iv. Recusal



Fair Hearing (cont.)

- C. Keeping the Record
- D. Other People Taping or Filming the Meeting
- E. Who Gets to Speak
- F. Ex parte Evidence
 - i. Receipt and consideration
 - ii. Post hearing receipt of Staff and Town Consultant Reports/Comments
 - iii. Questions Comments from Parties or Public During Deliberations



Legal and Procedural Considerations-Bias and Predisposition

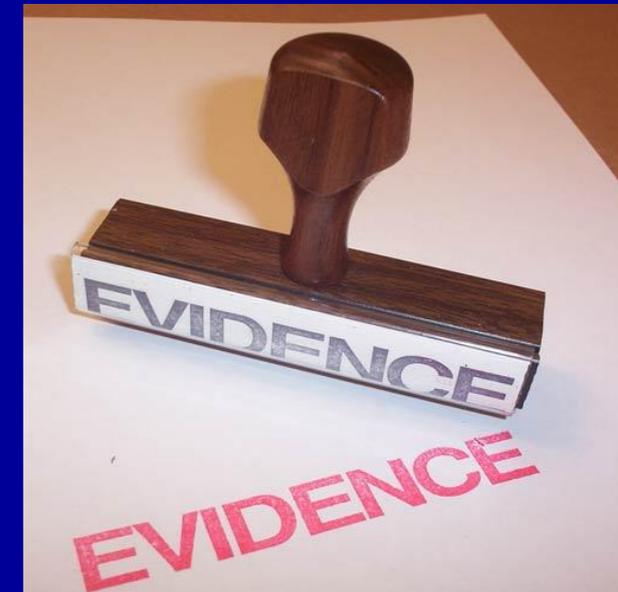
- Statutory prohibitions
- Conflicts of interest
- Perceived or potential conflicts of interest
- Prejudgment/predisposition
- Recusal



**BIG
LEGAL
MESS**

Evidence

- Exhibits
 - Numbering and logging
- Testimony
 - Cross-examination
 - Rebuttal
 - The last word
- Electronic Presentations
- Time limits for speakers



Legal and Procedural Considerations- Proper Motions

- Statutory restrictions on various types of applications
- Be clear
- Statement of reasons – when required, almost always desirable
- Conditions and modifications
- Restate complicated motions
- Be specific with stipulations and comments
- Integral conditions
- Denial “without prejudice”
- Approval of the application, not the applicant
- Reconsideration

Which of the following statements are generally true?

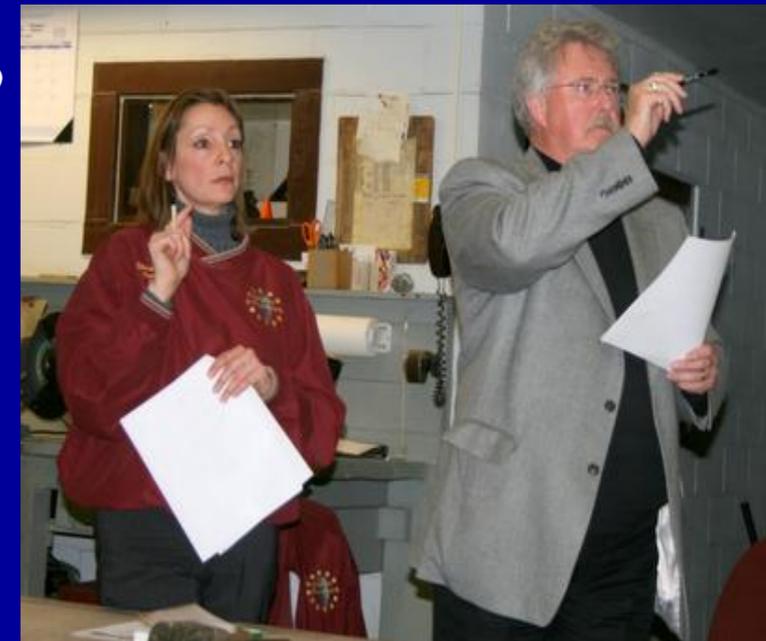
- a. An alternate who has not been seated should not participate in deliberations**
- b. A commissioner who was elected or appointed after the public hearing began is not eligible to vote**
- c. A commissioner should not vote on an application in which he has a pecuniary or other personal interest**
- d. The chairman may not vote except in case of a tie**
- e. A tie vote means that a motion carries**

Which of the following statements are generally true?

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- E. A tie vote means that a motion carries**

Legal and Procedural Considerations- Counting the Votes

- Alternate participation in deliberations
- “Familiarizing oneself with the record”
- Quorum-does your commission have rules or bylaws?
- Tie vote = the motion fails to carry, i.e. is defeated
- Abstentions
 - * Superior court split on treatment
 - * Better to seat an alternate than end up with an abstention
- Defeating motion to approve does not automatically equal denial
- Required supermajorities



Legal and Procedural Considerations-Special Mention

- 22a-19 environmental interventions
- Affordable housing applications
- Regional planning agency reports
- Neighboring municipalities
- When in doubt, call the town attorney

Seeking Legal Advice

- A. Be Proactive (an Ounce of Prevention...)
- B. Don't Leave Out the Details
- C. Executive Session

