



The Natural Services Network Data: Supporting Natural Resource Based Transportation Planning

Northeast Summit on Transportation and Conservation Planning
December 17-18, 2007

Carolyn Russell, AICP





The Natural Services Network





Natural services are the benefits nature provides “free” to humans:

“fundamental life-support services without which human civilizations would cease to thrive.” (Daily et al. 1997)



Natural Services Network



Water Supply

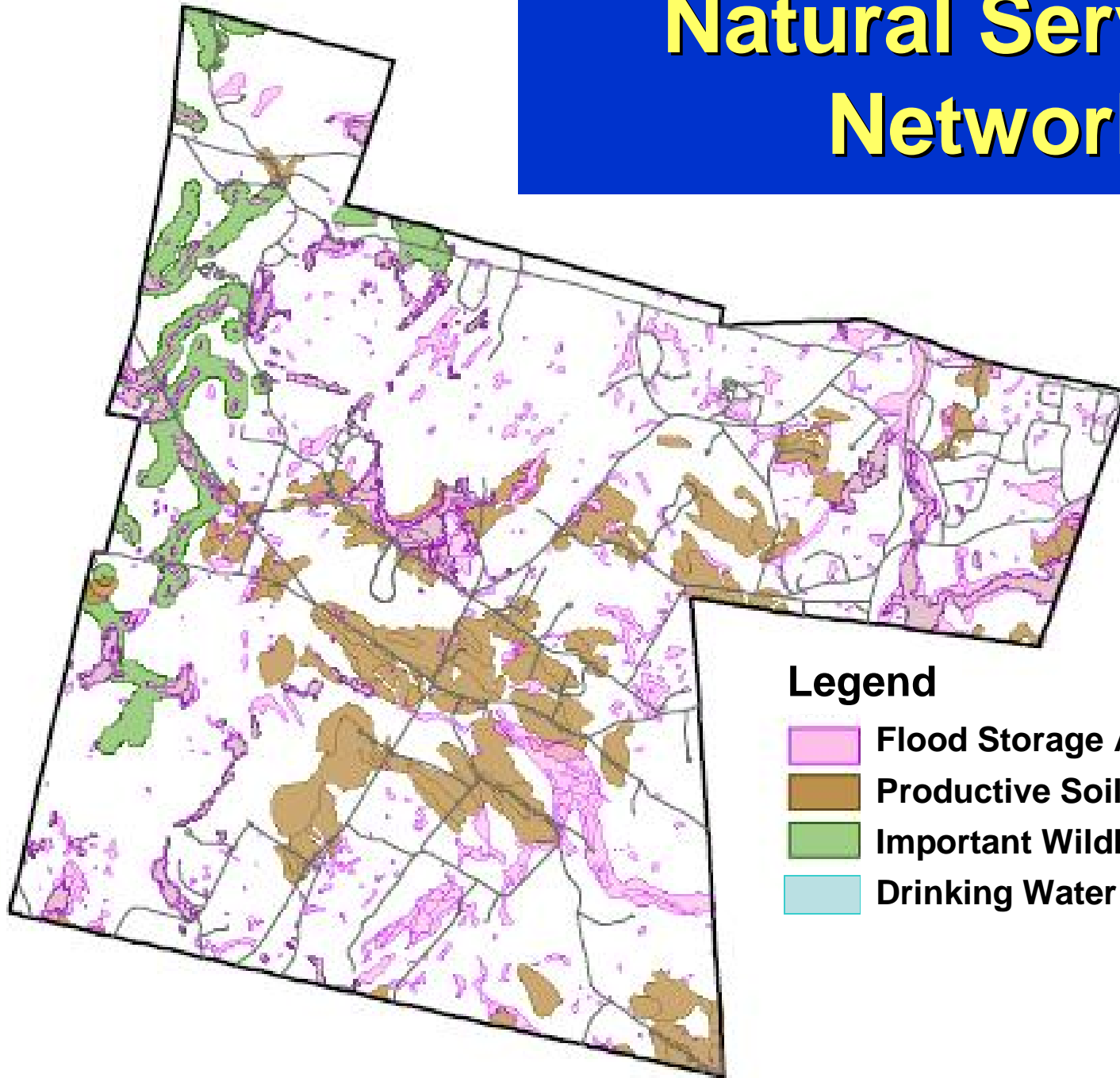
Flood Storage

Economically
Important Soils





Wildlife Habitat

A compilation of existing data as a **STARTING POINT**
for Natural Resource Based Planning

Natural Services Network

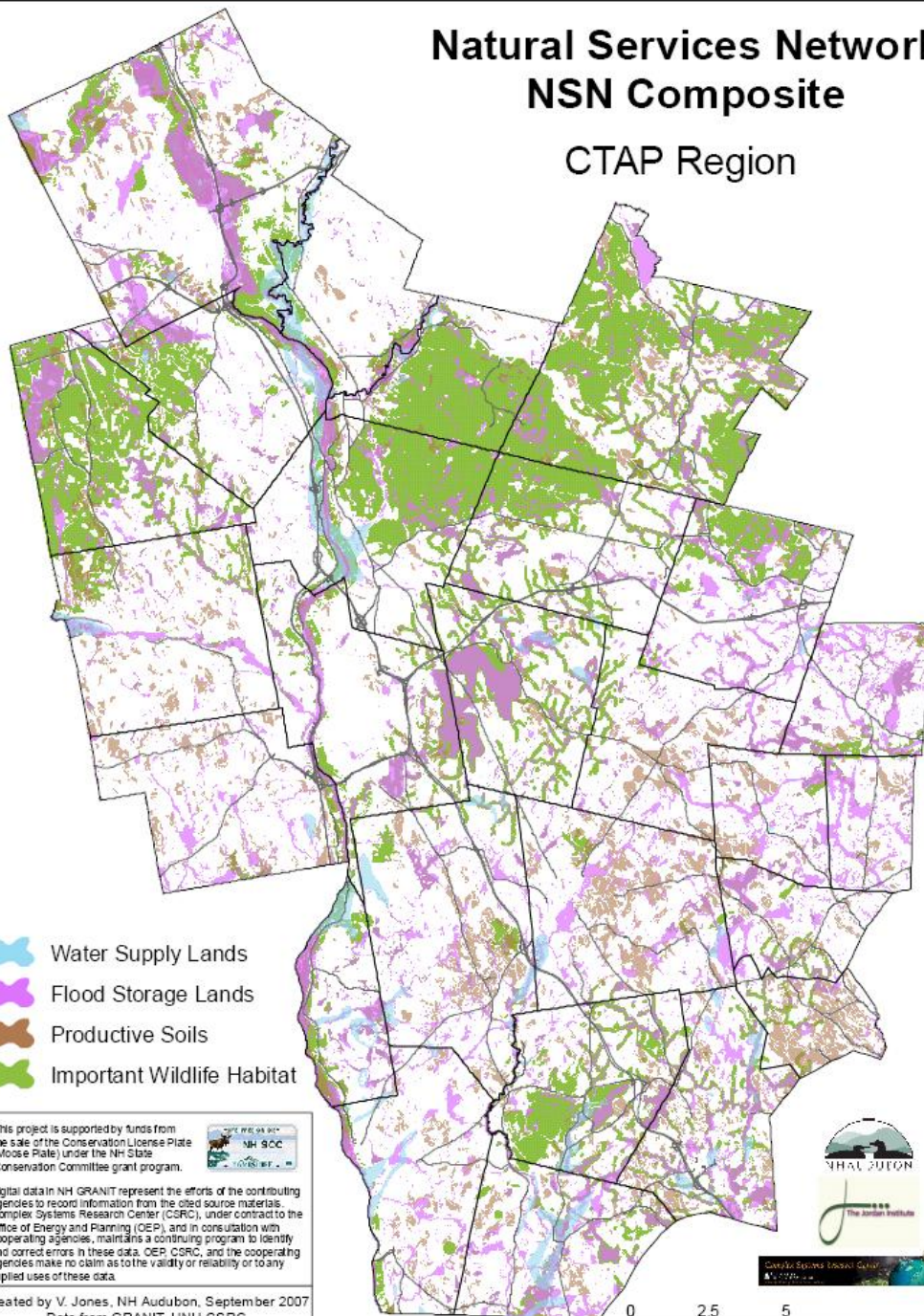


Legend

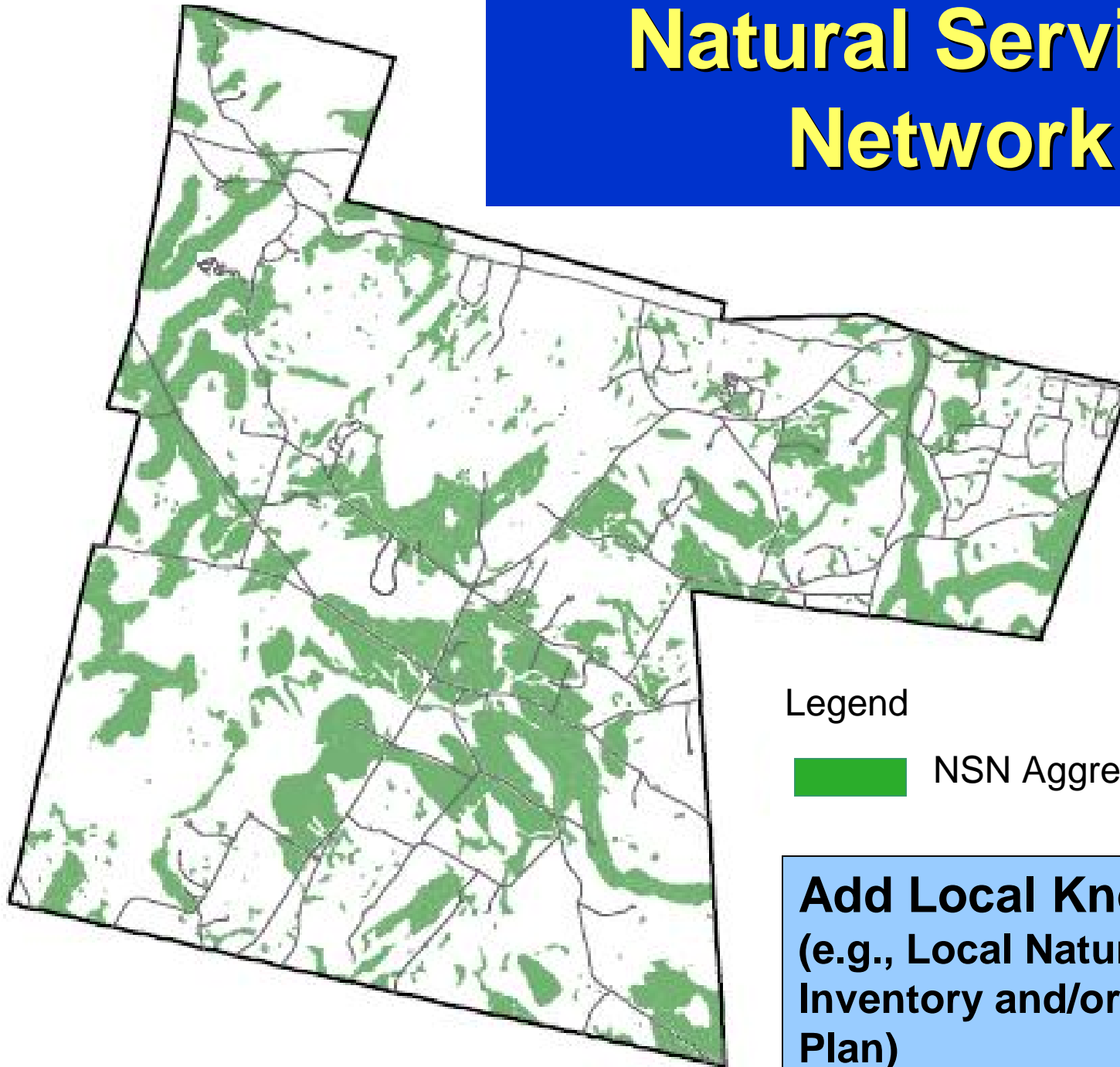
-  Flood Storage Areas
-  Productive Soils
-  Important Wildlife Habitat
-  Drinking Water Resources

Natural Services Network NSN Composite

CTAP Region



Natural Services Network

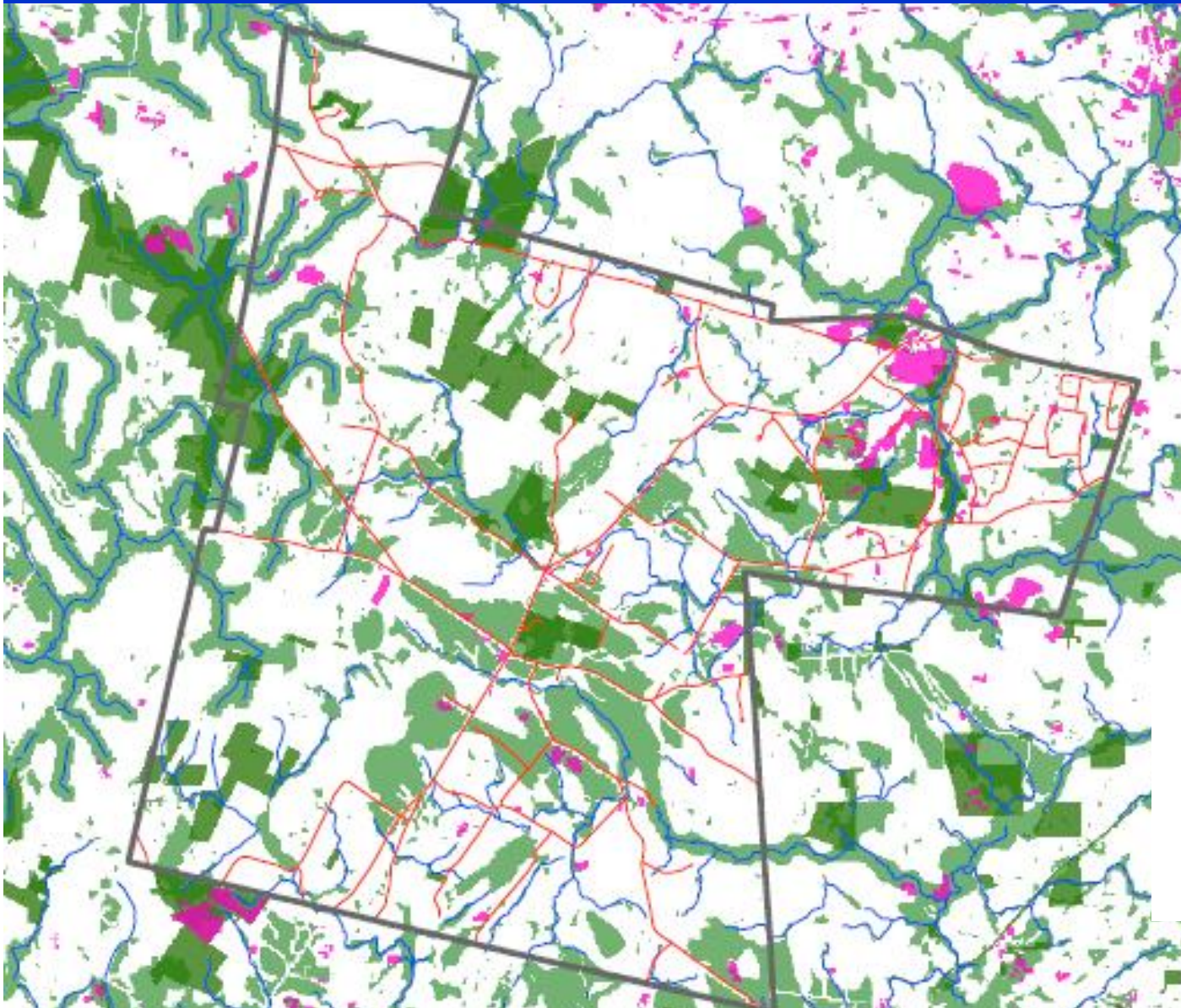


Legend

 NSN Aggregate

**Add Local Knowledge
(e.g., Local Natural Resource
Inventory and/or Conservation
Plan)**

Natural Services Network - Status



Legend

-  Developed Land
-  Protected Land
-  NSN Aggregate

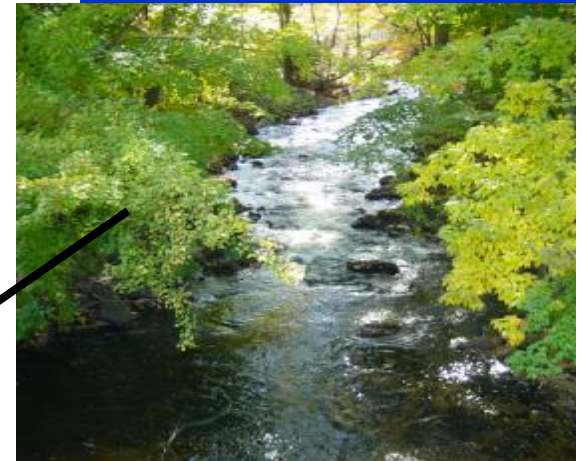
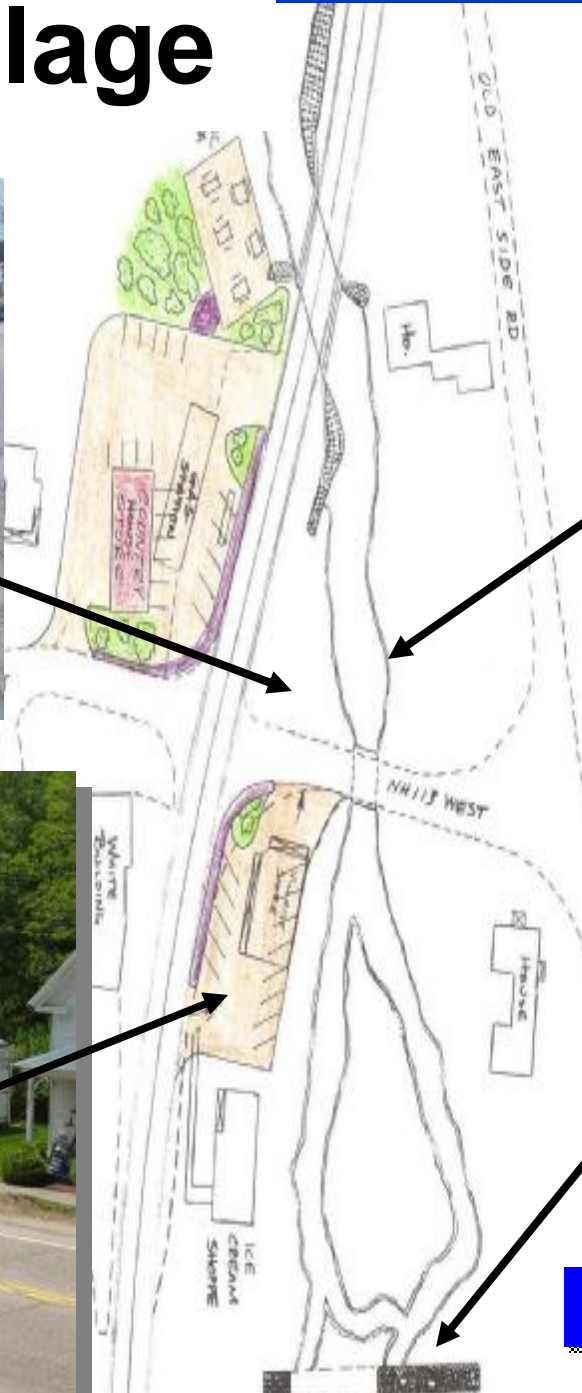
Example Projects

Chocorua Village

Rt 16/Rt 25 Intersection

Route 2 Corridor Study (later)

Chocorua Village



"Existing" Conditions

"Existing" Conditions



Chocorua Village

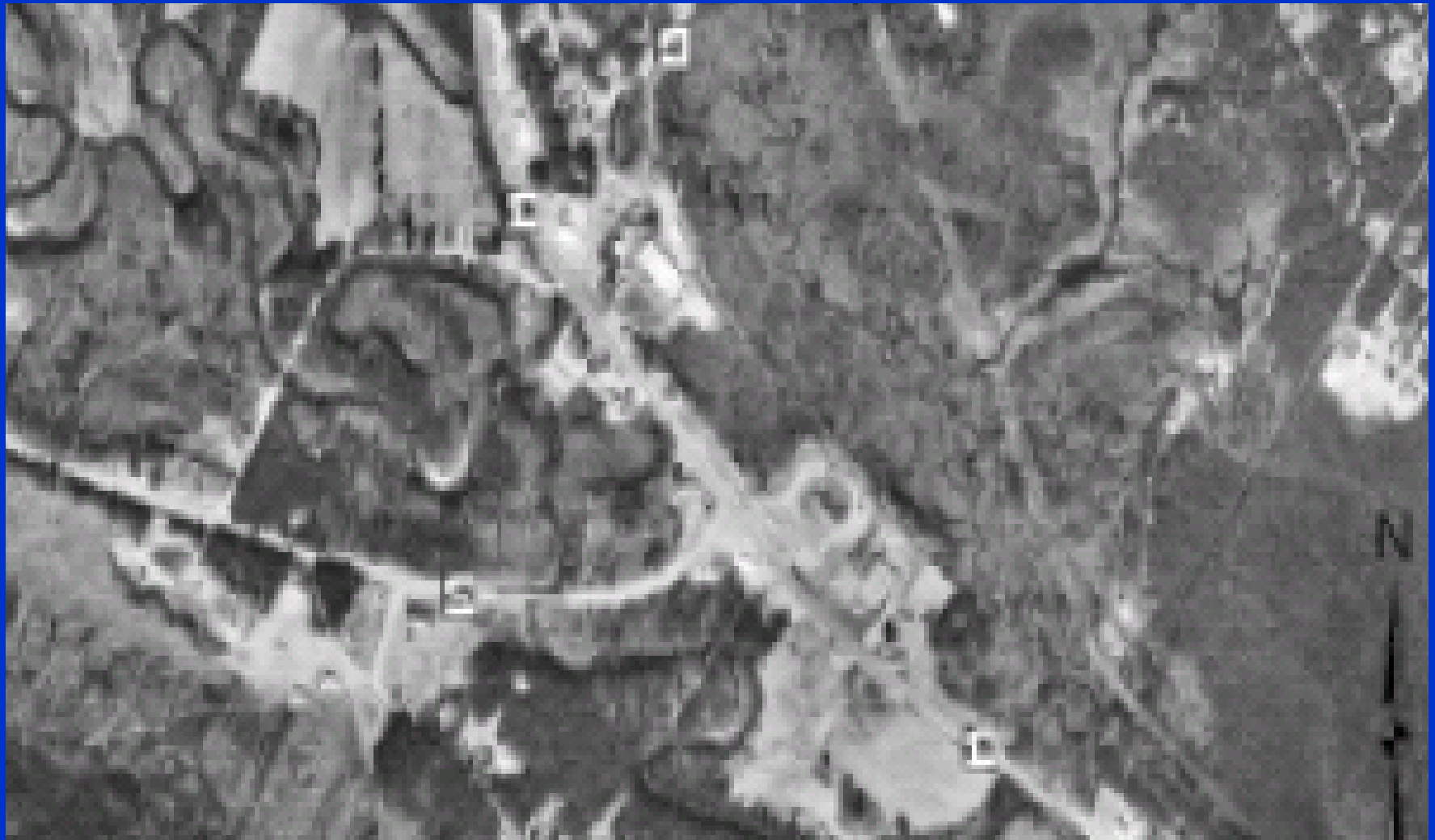




Proposed Photo
Simulation



Route 16W & Route 25 Intersection Design Charrette January 2002



West Ossipee landuse

Ossipee landuse shp

- Agricult
- Brush or
- Commerci
- Educalio
- Forested
- Government
- Gravel P
- Indoor C
- Institut
- Lodging
- Mixed Us
- Other Co
- Other In
- Outdoor
- Resident
- Road Tra
- Services
- Wood and

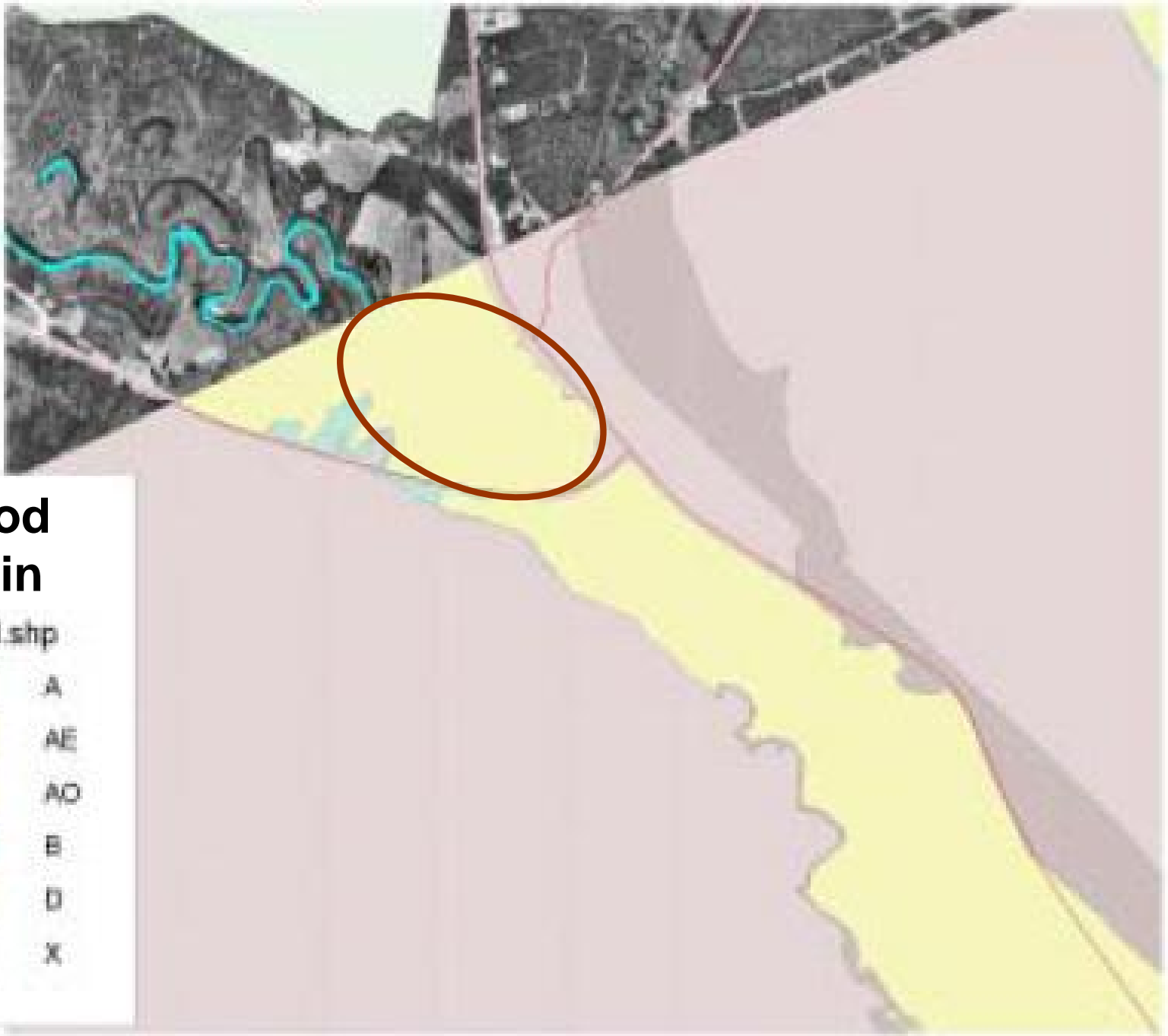


Zoning

Zoning shp

- Agricultural
- Commercial District
- RESIDENTIAL_A
- RESIDENTIAL_C
- Residential District
- Roadside Commercial District
- Rural District
- Rural Residential
- Village District



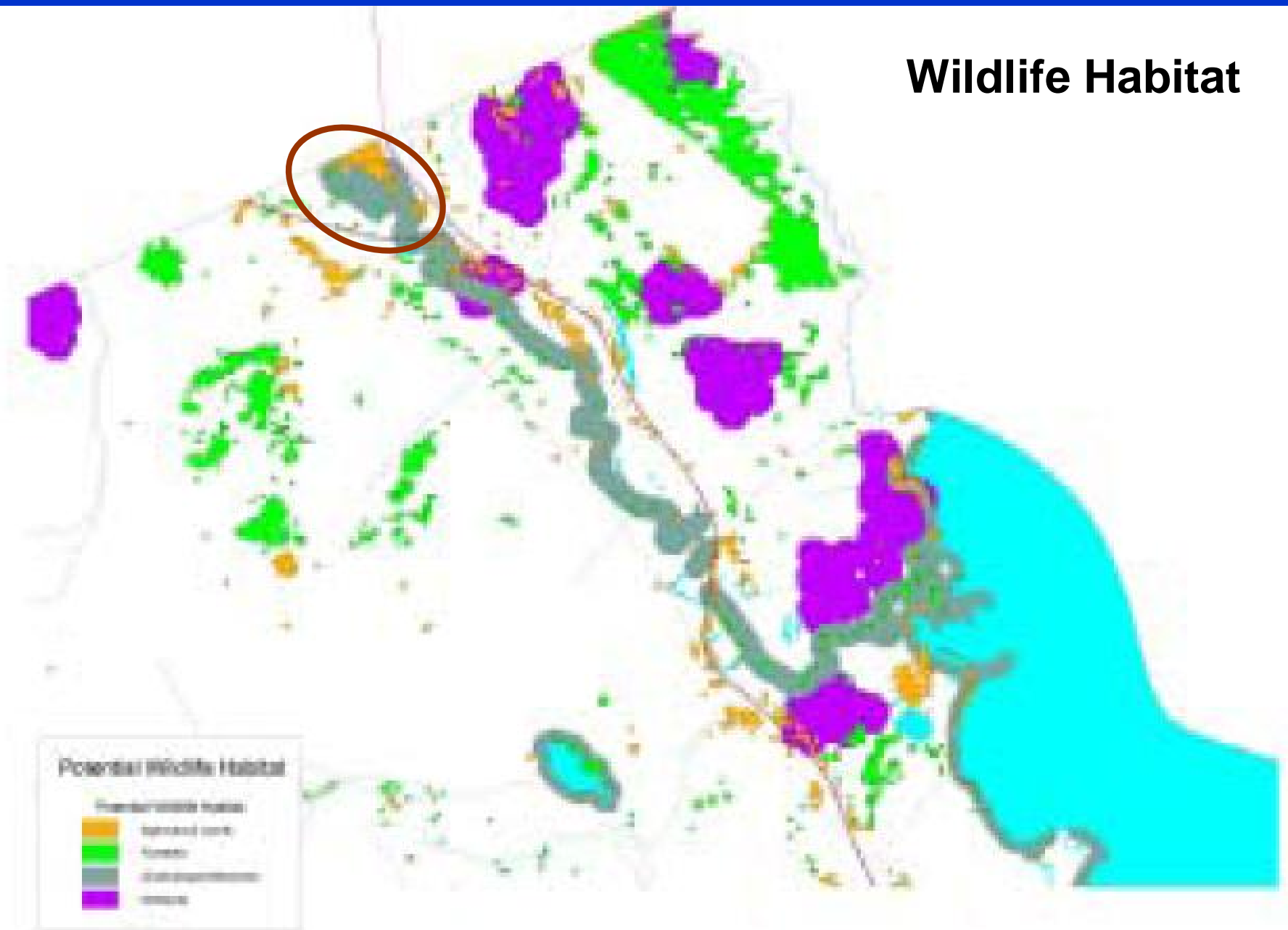


Flood Plain

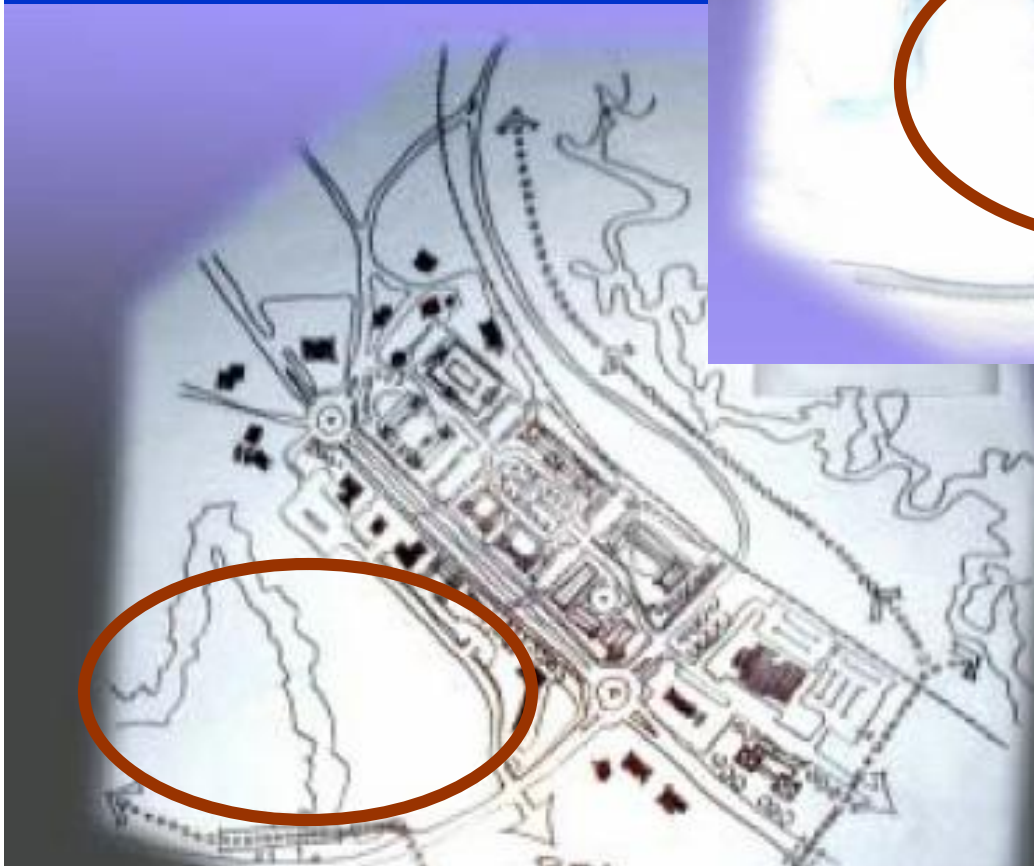
Flood.shp

	A
	AE
	AO
	B
	D
	X

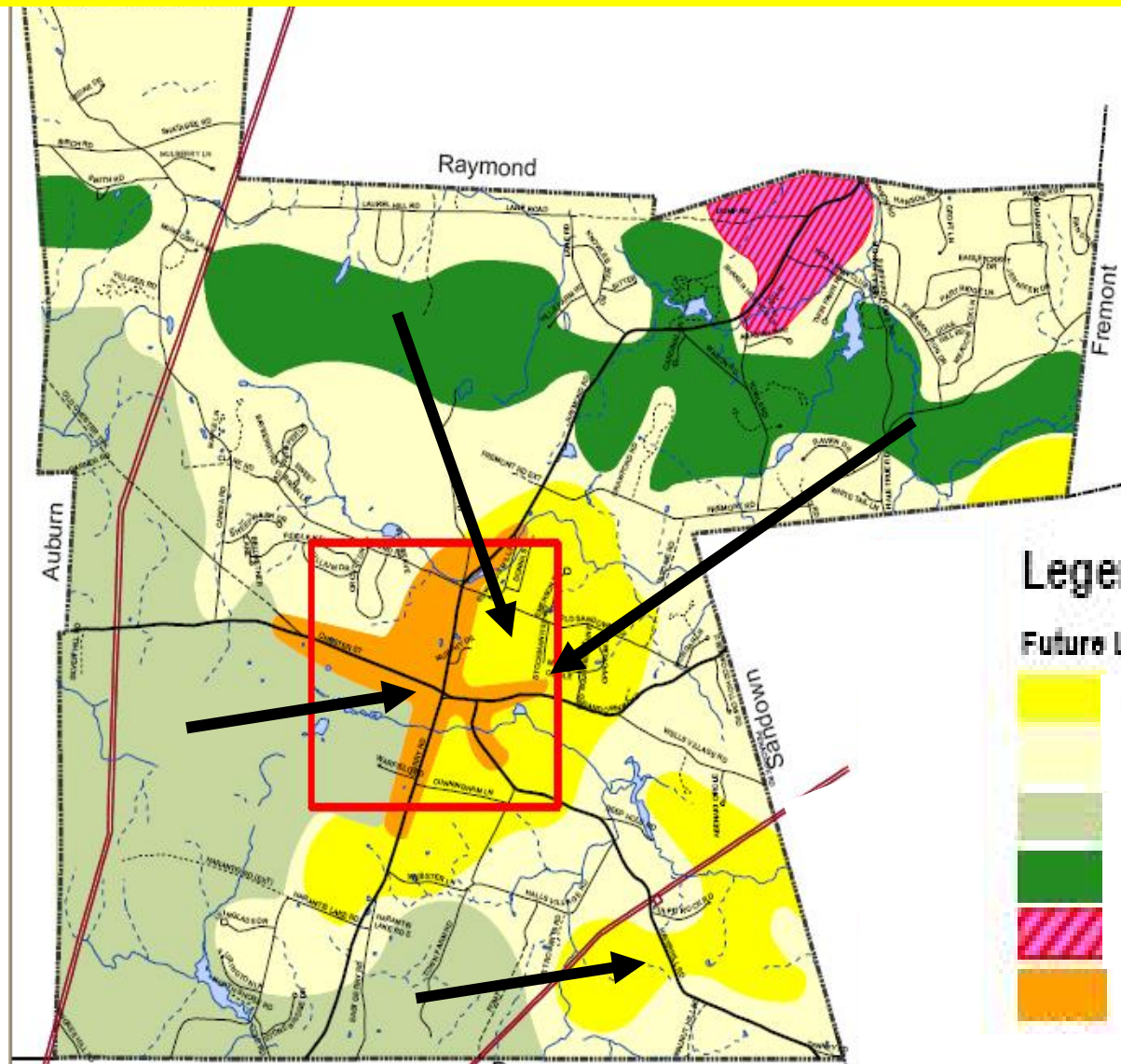
Wildlife Habitat



Visions from Charrette









Recommended Planning and Zoning Tools Improve Transportation and Conservation



Legend

Future Land Use

-  Moderate Density Residential
-  Residential—Existing Zoning
-  Cons., Ag., or Low Density Resid.
-  Conservation or Agriculture
-  Commercial or Light Industrial
-  Historic Village District

Village-Style and Nodal Development



“Respondents living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged.”

American J. of Public Health 2003, Kevin Leyden, Ph.D.



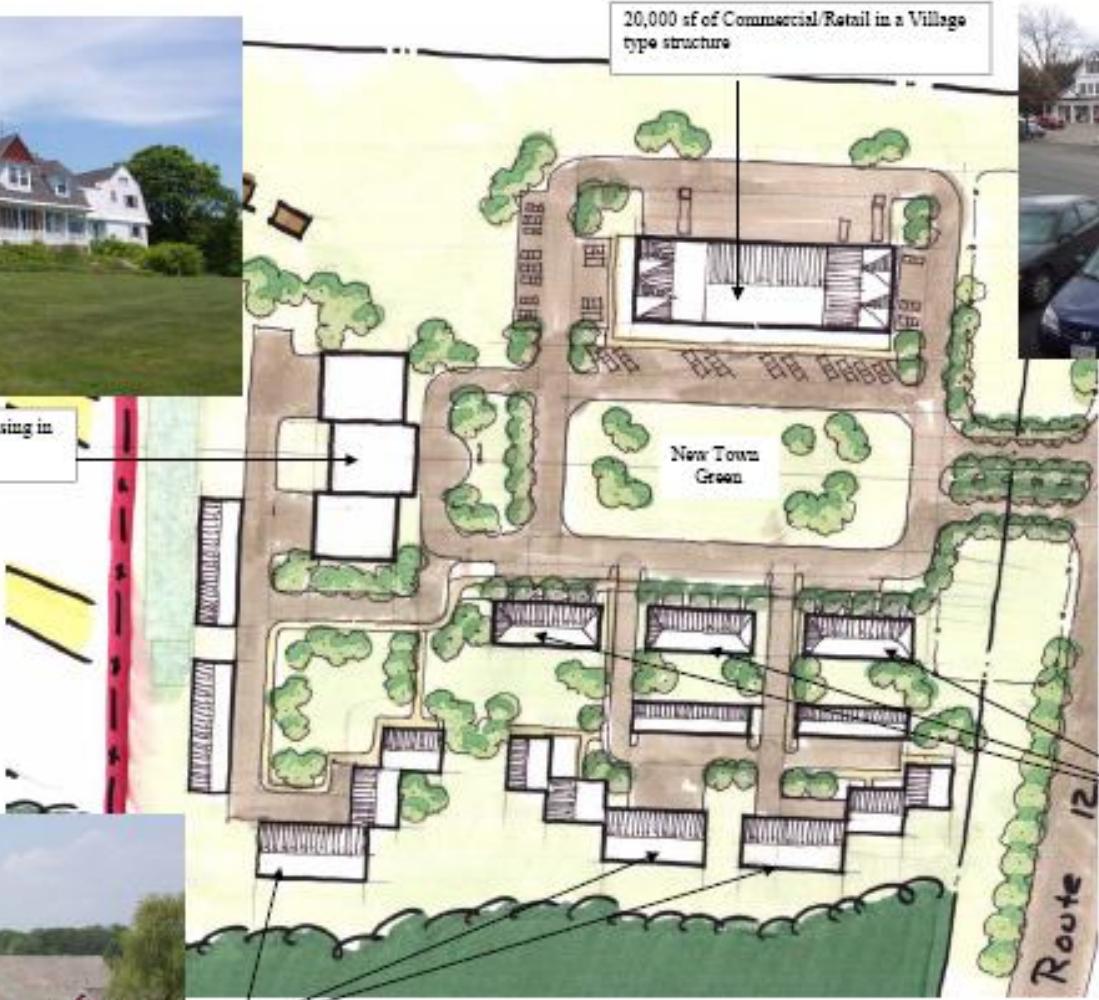
Boggy Meadow, Walpole





16 units of Extended Care Housing in a traditional home style

20,000 sf of Commercial/Retail in a Village type structure



12 units of Housing in Town House type structures



21 units of Housing in Farmhouse type structures

New Village Development

Questions and Discussion

What worked?

What did we learn?

What are the opportunities?

What are the obstacles?