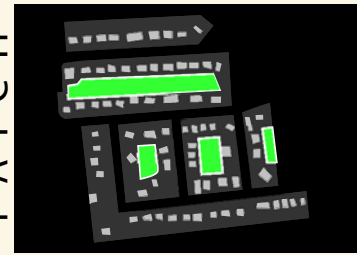


PATCH

Spatial Model



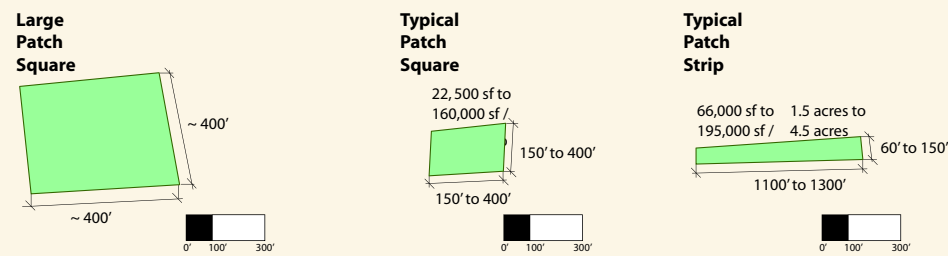
Purpose

wildlife stepping stones
pollinator viability
microhabitat diversity
human interface
local stormwater collection/
filtration

Forms

backyards
parks
sports fields
church/school/
commercial yards

Dimensions



Existing Applicable Regulations

"Re-use basins may be appropriate for use in large office parks, golf courses and campus style developments which have extensive lawn areas. Use of stormwater for irrigation and other non-potable uses would serve as a water conservation strategy."
- Highlands Water Protection and Planning Act, Chapter 5, Part 6: Future Land Use

"Development and redevelopment projects shall be required, to the maximum extent feasible, to meet a performance standard of 80% on-site stormwater capture for average annual precipitation."
- Highlands Water Protection and Planning Act, Chapter 5, Part 6: Future Land Use

Proposed Regulations/
Incentives

property owner imposed stormwater tax of \$0.50 per squarefoot of impervious surface

maintenance of patch financed by sliding scale township tax.

wildlife easement imposed within 10' setback of rear property line

Challenges

some properties will have to give up more backyard space than others

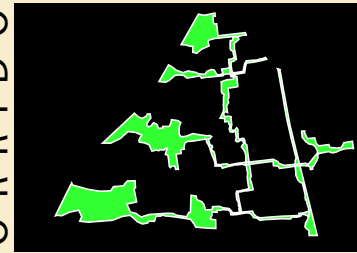
some homes/structures may have to be removed at 'critical' locations

several historic homes in P.P.- how flexible is the use of their backyard space?

Examples

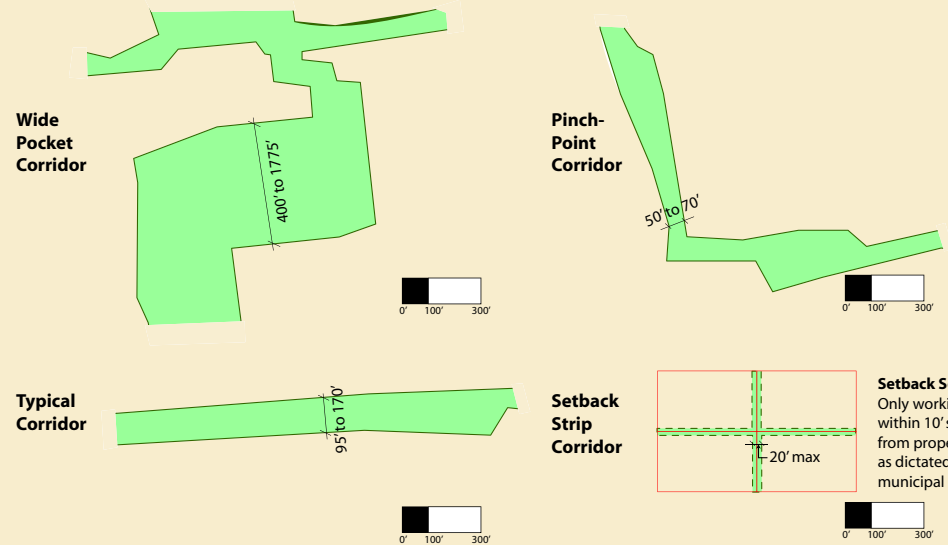
Leeland Ave backyards

CORRIDOR



wildlife movement
water collection and drainage
people movement
native seed dispersal

backyard connections
hedgerows



"No accessory building in a residential district shall be located closer than five (5) feet to any property line when such accessory building does not exceed fifteen (15) feet. An accessory building that has a height of fifteen (15) feet to eighteen (18) feet shall not be closer than ten (10) feet to any property line."
- Township of Pequannock 2008 Codebook

"(3) Provide an addition to or link between existing public recreation and/or open space areas, zero to three points.
(4) Support a regional open space and/or conservation initiative (for example, shore protection or preservation of landscape ecology, biodiversity, wildlife corridors, and/or greenways), zero to three points.
(5) Protect documented threatened and/or endangered species habitat, zero to three points."
- 7:36 7.1 Project Award Criteria, NJDEP Green Acres Program

"The project is accessible to population centers, is accessible by public transportation, walking or bicycling, and will create public access where none exists or where existing access is undeveloped or restricted, zero to four points."
- 7:36 7.1 Project Award Criteria, NJDEP Green Acres Program

a property owner responsible for giving up part of his or her land for a wildlife corridor will be reimbursed for property taxes paid on that parcel of land.

maintenance of corridor will be financed by sliding scale township tax. those who devote time and labor maintaining corridor will have tax waived.

wildlife easement imposed within 10' setback of rear property line

corridor flanks very close to homes in a few cases

corridor cuts through valuable real estate, including land for homeowner pools

how to cross over street grid successfully?

how to balance people and animal movement

corridor ranges in width, reaching tight size of only 20' wide

how to ensure safety of people along corridors

maintenance of corridors

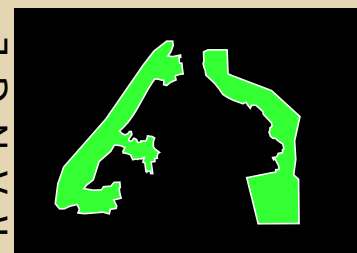
Remnant railroad people corridor

Middle Ground hybrid corridor

Highlands to River wildlife-only corridor

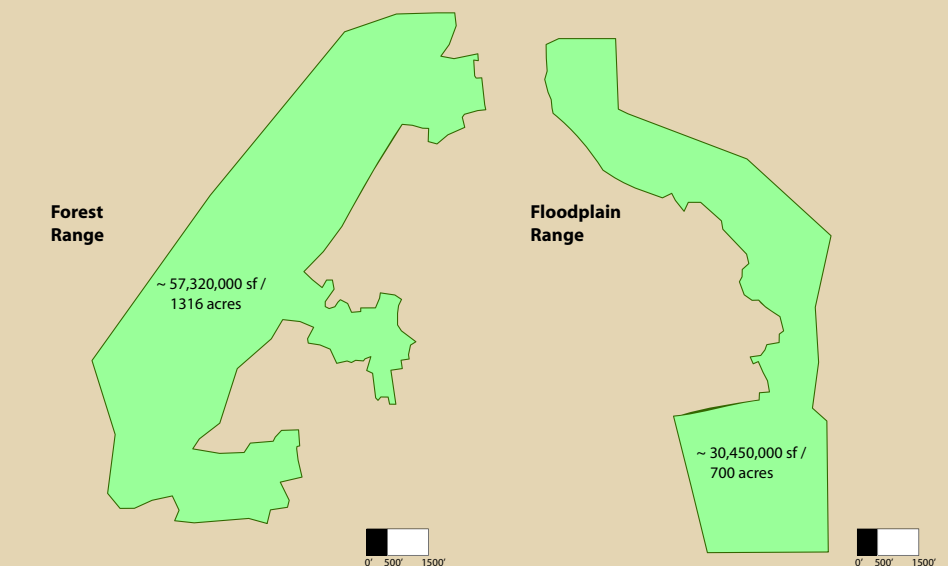
residential road underpass

RANGE



wildlife habitat
biodiversity safeguard
floodplain buffer
flood reduction

highlands large contiguous forest
pequannock/ramapo/pompton rivers and floodplains



"A local government unit may acquire a permanent conservation restriction with Green Acres funding... providing for the acquisition of those rights necessary to serve as a necessary buffer or protective area to existing permanent open space or to a unique natural area or wildlife habitat."
- 7:36 4.7 Acquisition of conservation restrictions or historic preservation restrictions, NJDEP Green Acres Program

"The TDR (Transfer of Development Rights) Program guides new growth and development away from lands with little or no capacity to accommodate human development without adversely affecting the integrity of the Highlands ecosystems."
- Highlands Water Protection and Planning Act, Chapter 5, Part 7: Land Use Equity

"Policy 1A2. To limit human development in the Forest Resource Area in the Preservation Area in order to protect and enhance forest resources, forest ecosystem integrity, Critical Habitat, and the quantity and quality of water resources."
- Highlands Water Protection and Planning Act, Chapter 5, Part 1: Natural Resources

"Objective 1D5b. Limit disturbance of existing natural vegetation or increases in impervious area within High and Moderate Integrity Riparian Areas... protect the water quality of adjacent Highlands Open Waters; and maintain or restore habitat value of the Riparian Area."
- Highlands Water Protection and Planning Act, Chapter 5, Part 1: Natural Resources

land deemed critical habitat will have conservation restriction applied with existing development phased out.

property owners of phased-out land will be granted transfer of development rights to designated density zones elsewhere in town.

development in floodplain to be phased out. if this is not feasible, 100% of stormwater runoff in developed floodplain areas must be captured and treated before emptying into river.

a few properties sprawling within range areas- will need to be phased out

287 and 23 major obstructions to ranges

Pompton River floodplain

interface between Highlands range and Pompton Plains development

287 underpass/overpass