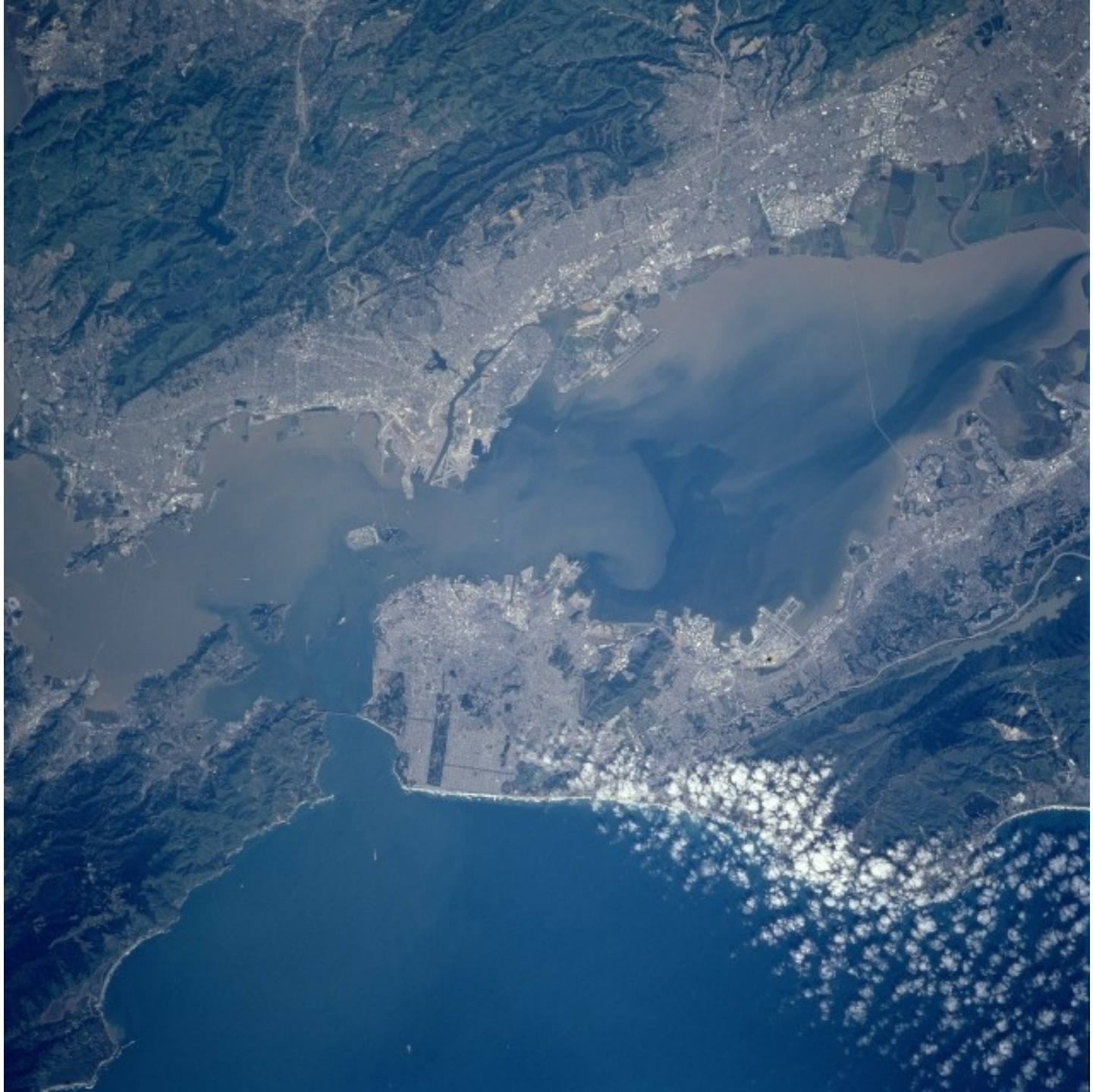


Urban/Suburban Landscape & Conservation

- I. Urban development to Suburban Sprawl
- II. Problems associated with housing development
 - A. Impacting habitat
 - B. Exotic species
 - C. Groundwater pollution
 - D. Animals that have “adapted” to suburban sprawl
- III. Urban/Suburban Planning and conservation
 - A. Landscape ecology & planning
 - B. Designing neighborhoods with conservation in mind
 - C. Points to keep in mind
 - D. Infill Development



I. Urban development to Suburban Sprawl

Urban Centers: The world has experienced unprecedented urban growth in recent decades. In 2000, about 47 percent of the world's population lived in urban areas, about 2.8 billion. There are 411 cities over 1 million...

Prior to WWII:



Suburbia, After WWII:





II. Problems associated w/housing development

- Wilderness area and farmland adjacent to larger cities has been converted to urban and suburban landscape.



A. Impacting habitat

A. Impacting habitat cont.

1) Fragmentation:

- Natural ecosystems have become increasingly fragmented by roads and developed areas
- Decrease in patch size
- Increased isolation of patches



2) Alteration or loss of wetland/riparian areas:



Problems associated w/development cont.

B. Increase in exotic species – cats & dogs...

- Conventional landscaping also favors horticulturally cultivated exotic species to native plant species

C. Pollution of groundwater

Ground water pollution due to “storm run-off”

-

D. Animals that have “adapted” to suburban sprawl:

- Deer
- Raccoons, opossum
- Canada Geese (not really Canadian anymore)
- Peregrine Falcons
- Mexican Freetail Bats



Two Canada Geese discussing "What's Happening" outside the City of Pleasant Hill City Complex!



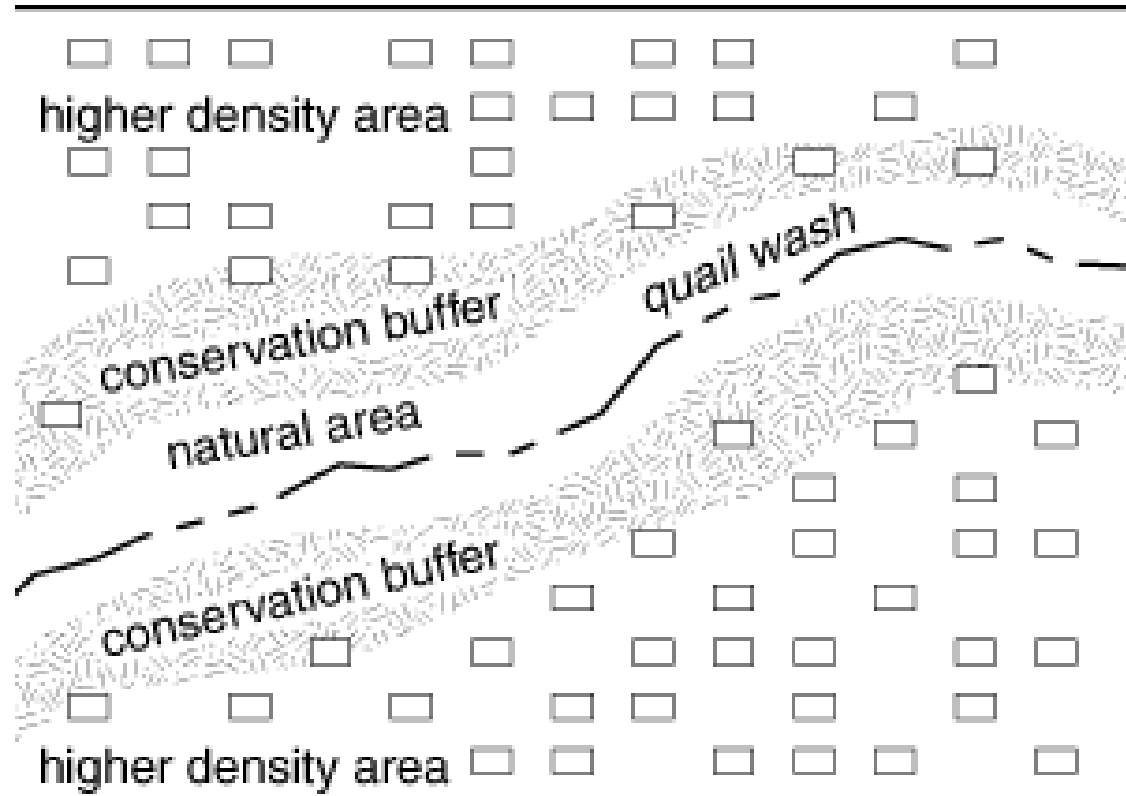
III. Urban/Suburban Planning and conservation

In the past, no thought put into how areas would be developed in respect to ecology

- Shifting Focus:
- Landscape ecology and urban planning
 - integration possibilities of ecological and aesthetic values into **planning** and management of **urban** areas
 - Simple plantings of native shrubs, wildflowers and grasses can attract birds and butterflies and other animals, providing food and cover. In addition to bringing nature to your doorstep, many Urban Conservation practices can help improve the quality of our lakes and streams by reducing stormwater runoff.

A. Landscape ecology & planning

- ✓ Urban landscape, habitat patches also present
- ✓ Patch quality, distance connectivity all play a part in species composition in the urban setting





Well-managed parks can provide critical habitat, and outdoor opportunities:
http://www.parks.sfgov.org/site/recpark_index.asp?id=21196#Naturalist

B. Designing neighborhoods with conservation in mind

1) Cluster subdivision

- minimum open space requirements, minimum district size requirements, reduced lot size requirements in certain circumstances and reduced yard requirements
- Typically, road frontage, lot size, setbacks, and other traditional subdivision regulations are redefined to permit the developer to preserve ecologically sensitive areas, historical sites, or other unique characteristics of the land being subdivided

2) Open space zoning

- new construction to be located on only a portion – (typically half) of the parcel

Arrangement matters!

- each must have a uniform road frontage
- equal lot areas with homes placed in the same
- location on each lot regardless of the parcel's characteristics
- all of the land is privately owned by the individual homeowners





Example:

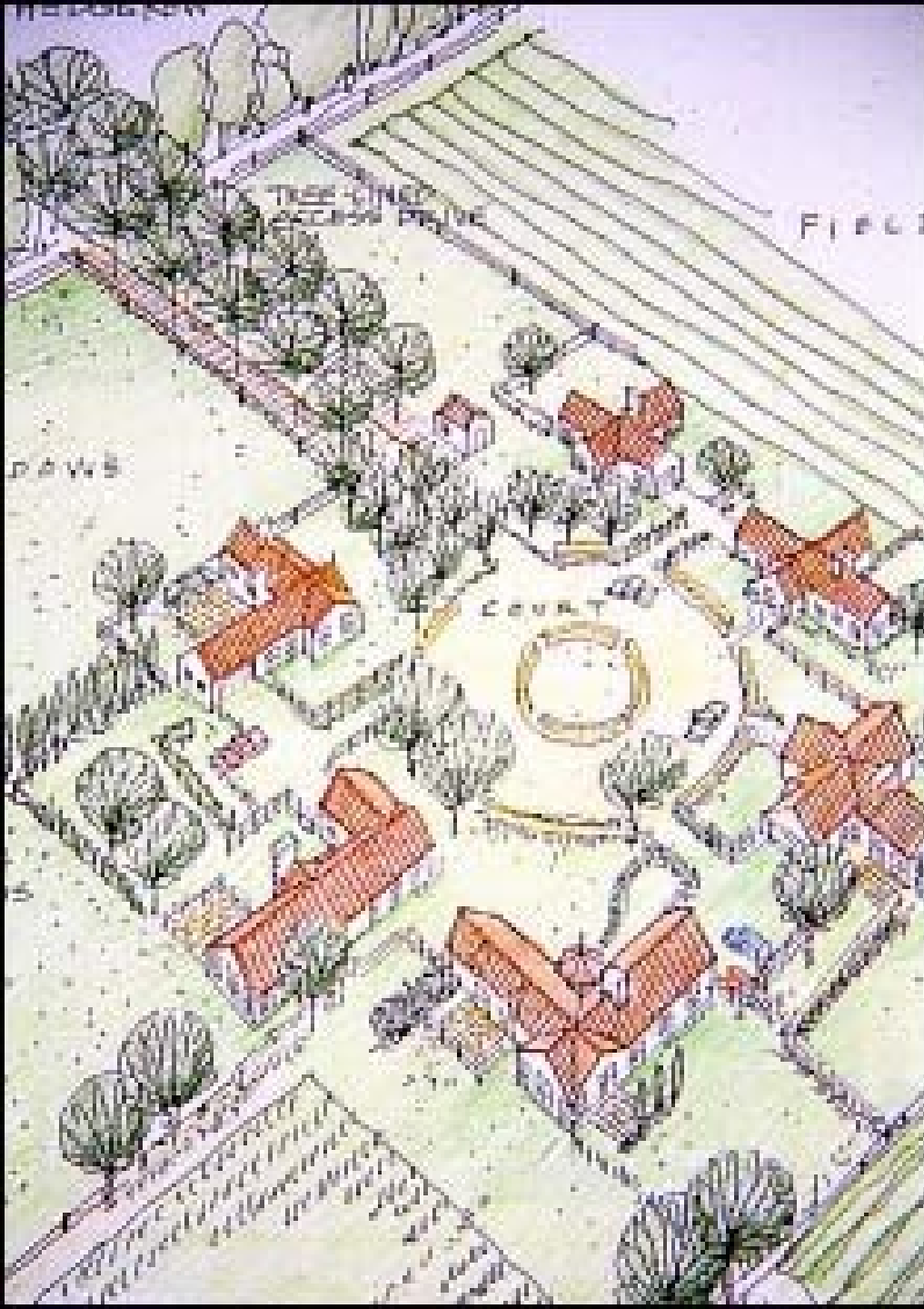
interpretive center that showcases the wildlife and habitat of the region

situated near the high point of the area, includes an overlook that is linked to a trail system that passes through the site

These clusters have lots that are sufficiently large to allow small agricultural plots or additional open space.

pedestrian paths and trails facilitate walking and cycling by linking different neighborhoods and clusters...

& bicycling may be a viable alternative to driving in some situations if a regional network of trails or bicycle-friendly roads exist, and distances are not too long.



Neighborhood Green.

C. Points to keep in mind:

- the amount of open space in a given community says little about the actual functioning of the environment
- planned communities may harbor a system of natural areas that function no better than the fragments found in unplanned, piecemeal suburban development
- four characteristics of an environmentally viable suburban landscape:

D. Infill Development

- “Not designed for single use, low density, domination by automobiles & highways – rather it creates neighborhoods & districts that have mixed use, residents of mixed income and diversity, and it serves pedestrians & cyclists”

