

Managing peri-urban change in the Pacific Northwest and Taiwan

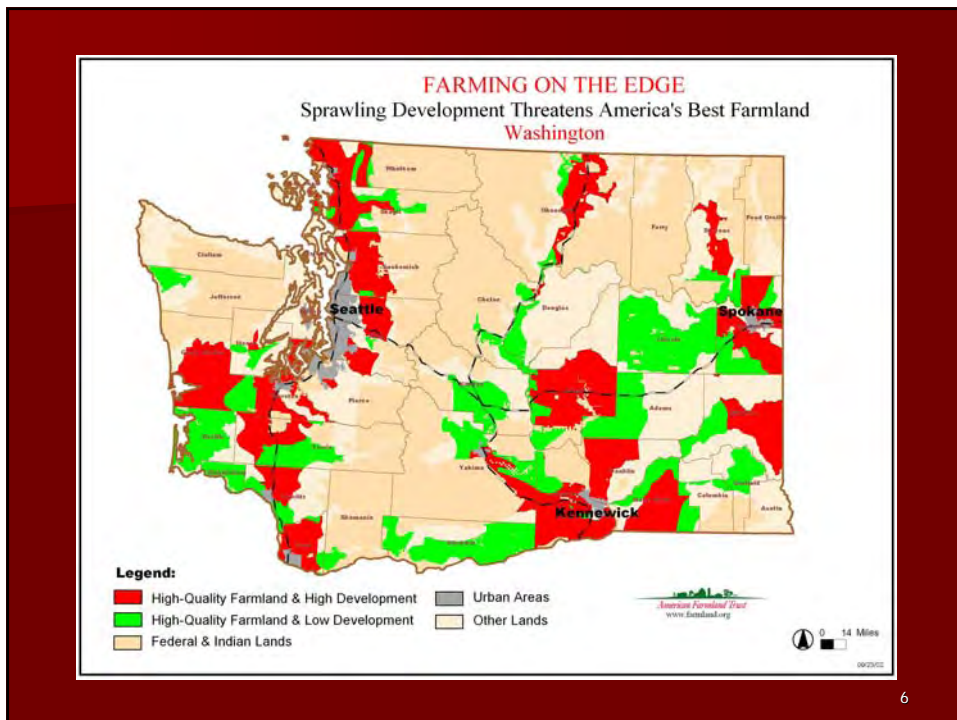
William W Budd PhD
Division of Governmental Studies and Services
Washington State University

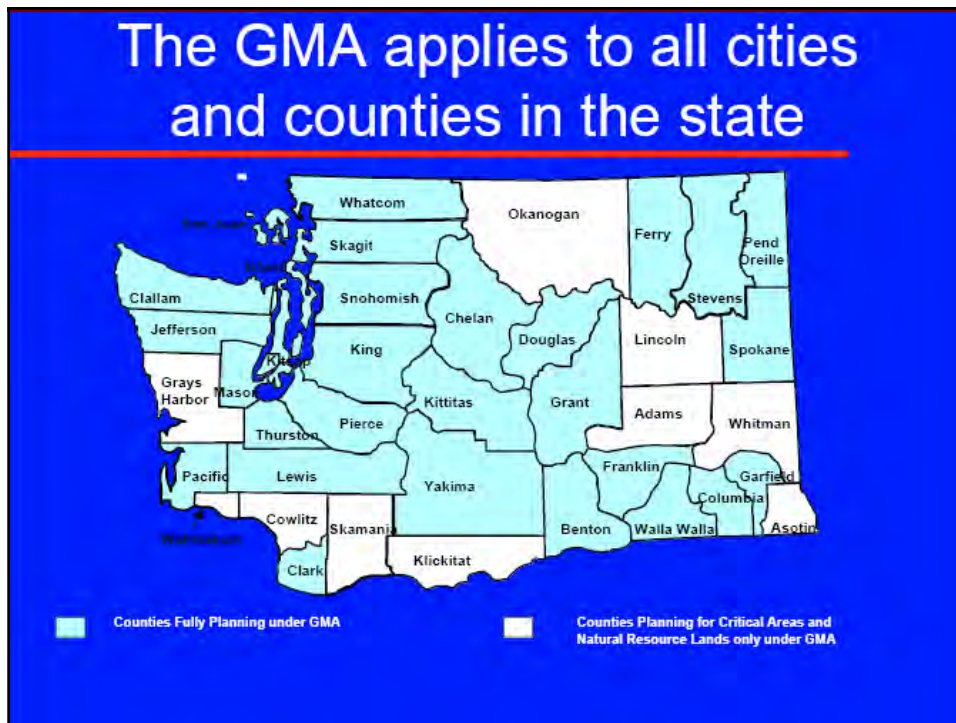




Planning Approaches

Washington State	Taiwan
"Bottom up"	"Top down"
Growth management goals	Economic development driven
Public participation throughout	Final public presentation
Urban growth boundaries	Urban planned district
Agriculture, forest, mining of state-wide significance identified and protected	Questionable
Critical areas identified and protected	Protected areas
Strong agency coordination	Weak agency coordination
Concurrency	none
Integrated enforcement	Separate enforcement





Growth Management Planning Goals

- Urban growth
- Reduce sprawl
- Transportation
- Housing
- Economic development
- Property rights
- Permits
- Natural resource industries
- Open space and recreation
- Environment
- Citizen participation and coordination
- Public facilities and services
- Historic preservation
- *Shoreline Management

Growth Management Comprehensive Plans

- Mandatory Elements
 - Land use
 - Housing
 - Capital facilities
 - Utilities
 - Rural
 - Transportation
 - Economic development
 - Parks and recreation

9

Growth Management Requirements in Peri-Urban Areas

1. Designate and protect natural resource lands
2. Designate critical areas
3. Establish urban growth boundaries
4. Protect the functions and values of critical areas

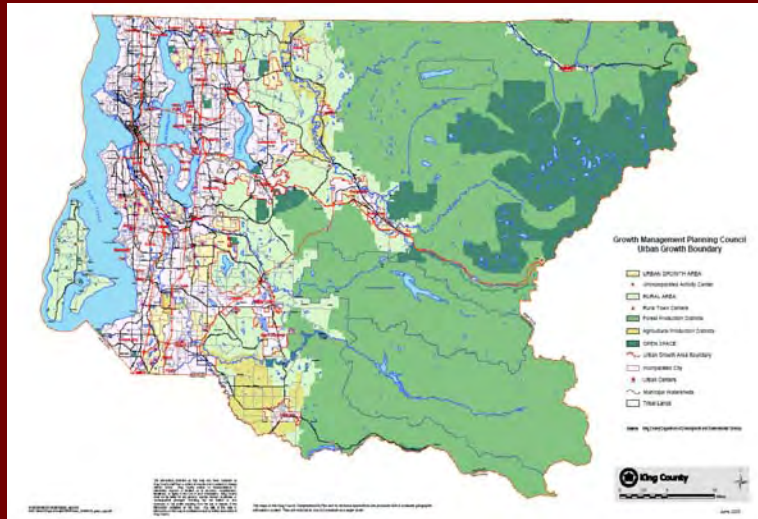
10



1. Designate and Protect Resource Lands: King County Annual Growth Report 2008

- "A fundamental component of the Countywide planning strategy is the maintenance of the traditional character of the Rural Area with its mix of forests, farms, high-quality natural environment....Commercial and non-commercial farming...shall be encouraged to continue and to expand as possible." (CPP FW-9. See also LU 22 - 23)

Designate and protect natural resource lands

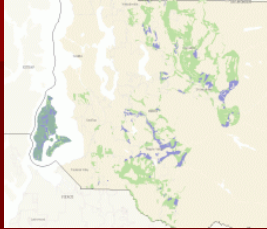


Agricultural Protection Districts

- There are 42,000 acres designated as farmland in the APDs of King County. This acreage has remained constant at about 3% of the county for the last 25 years.
- About 13,200 acres of farmland were permanently protected through the Farmland Preservation Program.



2. Designate Critical Areas



Landslide drainage designations



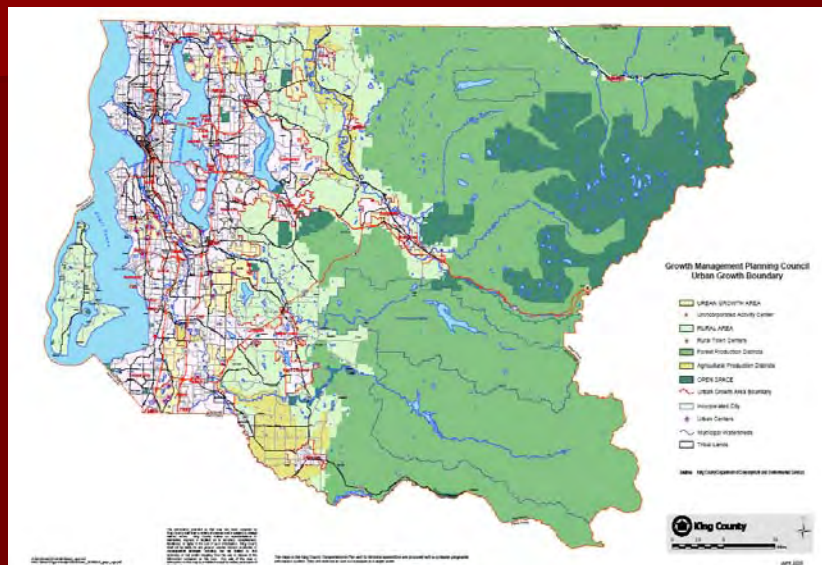
Landslide hazard areas



Basin and Shoreline Conditions

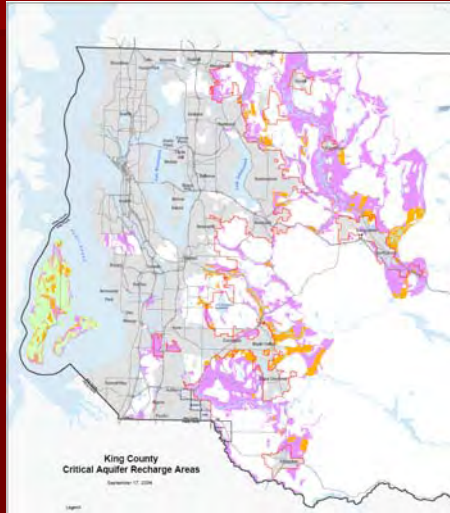
15

3. Establish Urban Growth Boundaries



6

4. Protect Function and Values of Critical Areas









Critical Aquifer Recharge Areas

17

4. Protect Function and Values of Critical Areas

**WILDLIFE HABITAT CONSERVATION AREAS:
BREEDING SITE PROTECTION**

 <p>Bald eagle Bald eagles typically nest in a large tree with stout upper branches within a stand of large trees close to a lake, river, or marine shoreline. If a bald eagle nest is identified on the property, the following protections will apply: • No clearing or grading disturbance from January 1 through April 30 (incubation and first three weeks of brooding). • Maintain a 400-foot radius around nest trees. • Prohibit use of land-clearing machinery within 800 feet from January 1 through August 31.</p>	 <p>Osprey Ospreys typically nest in snags that are 10-130 feet tall, with a broken top or strong side limbs, and surrounded by water or within 100 feet of water. If an osprey nest is identified on the property, the following protections will apply: • No disturbance within 660 feet from April 1 through September 30. • Maintain 250-foot radius around active nest.</p>
 <p>Great blue heron Great blue herons nest in colonies (concentrated groups of nests) typically found in a mature forest stand with an uneven canopy of trees at least 50 feet high, within 0.4 miles of water. If a great blue heron colony is identified on the property, the following protections will apply: • No clearing or grading disturbance from January 1 through July 31 within 624 feet around existing colonies. • Maintain 600-foot radius around existing colonies that are known to be stable; buffer may be increased by 104 feet if population of herons is declining.</p>	 <p>Peregrine falcon Peregrine falcons typically locate their nests (eyries) on cliffs at least 100 feet high. If a peregrine falcon nest (eyrie) is identified on the property, the following protections will apply: • No human activity along the nest cliff rim, immediately below nest cliff, on or on the cliff face within 1,000 feet of any time of year. • No surface-disturbing activities that would produce loud noises (e.g. blasting, operation of chainsaws and heavy machinery) from March 1 through June 30 within .5 mile feet of nest. • Exclude powerlines 1,000 feet from eyries.</p>
 <p>Marbled murrelet Marbled murrelets nest in large Douglas-Fir, Sitka spruce, western hemlock, or western redknot in old-growth forest. They nest in trees containing platform or deformities such as large or forked limbs, broken tops, dead snags, or rotten trunks. The parents take turns every 3 hours incubating the egg or flying up to 12 miles out to sea to feed. If a marbled murrelet nest site is identified on the property, the following protections will apply: • Protect area within 0.3 miles of nest trees.</p>	 <p>Spotted owl Spotted owls typically nest in cavities, broken tops, or other deformities in trees located in old-growth forest or other mature forest with a layered, closed canopy and a supply of large trees or snags with appropriate nest sites. If a spotted owl nest is identified on the property, the following protections will apply: • Protect 3,700-foot radius from nest trees.</p>
 <p>Northern goshawk Northern goshawks typically nest in large, contiguous tracts of old-growth or mature forest with large trees, a closed canopy, and an open understorey of shrubs and herbs, generally near the base of north-facing slopes. The goshawk is very protective of its nest and will attack anyone who enters the zone. If a northern goshawk nest is identified on the property, the following protections will apply: • Maintain 1,500-foot radius around active nest sites located outside the urban growth area.</p>	 <p>Townsend's big-eared bat Townsend's big-eared bats typically form nesting colonies and hibernate in caves or mines, or occasionally in buildings. If a cave, mine or other structure containing a Townsend's big-eared bat colony is identified on the property, the following protections will apply: • Maintain a minimum 450-foot radius in all directions from the entrance of a cave or mine of an active and alternate nursery sites located outside of the urban growth area from June 1-October 1. • Establish 450-foot radius around the entrance to the cave or mine serving as winter hibernacula November 1 - March 31 outside of the urban growth boundary. • A building, bridge or tunnel, or other structure used solely for day or night roosting shall not be altered from March 1-September 30. • The entrance to a cave or mine that is protected because of bat presence is protected from human entry May 1-September 15. • Safe entrance to cave or mine that is protected because of bat presence must be designed to allow bats to enter and exit.</p>
 <p>Red-tailed hawk Red-tailed hawks are one of the earliest breeders in the Pacific Northwest. Nest characteristics vary widely with vegetation and topography. Common characteristics include an unobstructed access to nests from above and a commanding view of the adjacent environment. Nest sites are tall trees, in open areas and often close to water. If a red-tailed hawk nest is identified on the property, the following protections will apply: • Maintain an area with a radius of 325 feet from an active nest located outside the urban growth area. • Clearing and grading is not allowed within 660 feet of an active nest located outside of the urban growth area from March 1-July 31.</p>	 <p>Vaux's swift Vaux's swifts nest in hollow trees or cavities left by jelled woodpeckers within old-growth forest. If a Vaux's swift nest is identified on the property, the following protections will apply: • Maintain a 200-foot radius around active nest sites outside the urban growth area. • No clearing or construction activities within 400 feet of active or potential nest trees from April 1 through October 31, unless potential nest trees is proved to contain no nests.</p>

18

Critical Area Protection and Best Available Science

In designating and protecting critical areas ... counties and cities shall include the best available science in developing policies and development regulations to protect the functions and values of critical areas. In addition, counties and cities shall give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries. (RCW 36.70A.172)

19



Lessons for Taiwan?

- Public engagement is vital
- Linking enforcement with planning
- Agency cooperation and coordination
- Planning for peri-urban management requires a substantial investment of resources

21

