



RPA Assessment: Use of Land Use/Land Cover Scenarios and Projections

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The RPA Assessment



- The Forest and Rangeland Renewable Resources Planning Act of 1974 mandates a national report (RPA Assessment) on the conditions and trends of renewable resources every ten years **on all forest and rangelands.**
 - The RPA Assessment provides a snapshot of current U.S. forest and rangeland conditions and trends; identifies drivers of change; and **projects 50 years into the future.**
 - The Assessment includes analyses of outdoor recreation, fish and wildlife, wilderness, forests, water, range, urban forests, and the potential effects of climate change on these resources.
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RPA Assessment: Use of Scenarios

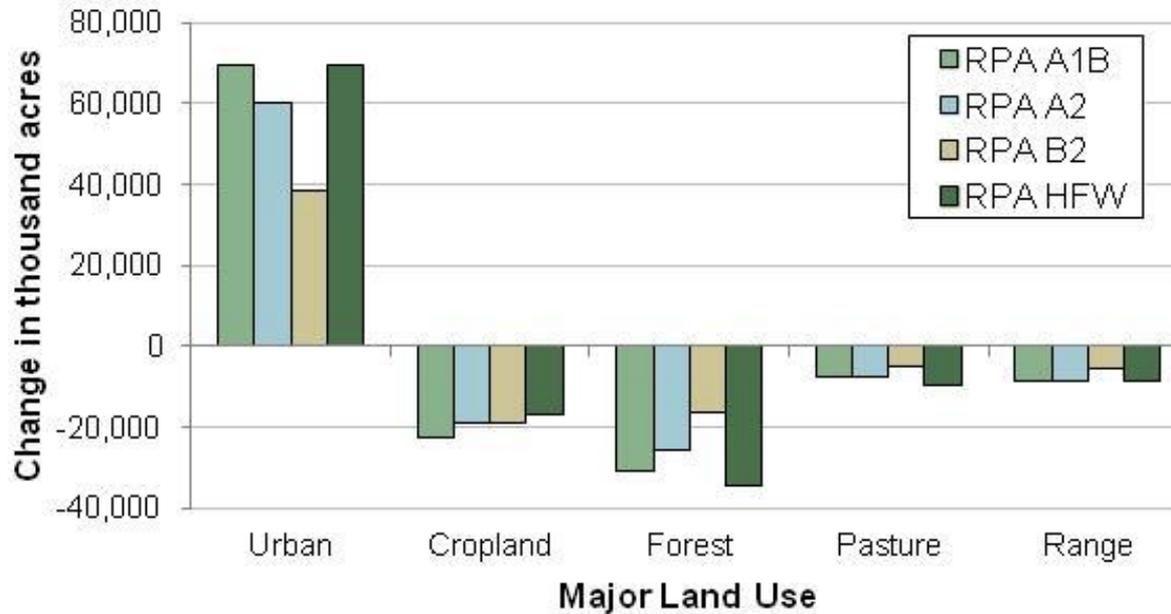


- Common assumptions are the “glue” that holds the individual RPA resources analyses together.
- Use of common assumptions for population change, economic growth, land use change have been used since 1979 RPA Assessment.
- 1979-1989: common assumptions developed jointly with several USDA agencies and BLM
- For 2010 RPA, we moved to IPCC-like scenarios, each with climate, socioeconomic, and land use projections, all downscaled to county level.

Past use of LULCC scenarios

- 2010 RPA land use projections not directly linked to IPCC SRES.
- Land use projections linked to SRES through population and economic projections.
- Land use projections based on NRI historical data, projected for 5 major land use categories.
- Spatial scale: county level primarily to match with socioeconomic projections.
- Temporal scale: 50 years.

Land Use Change

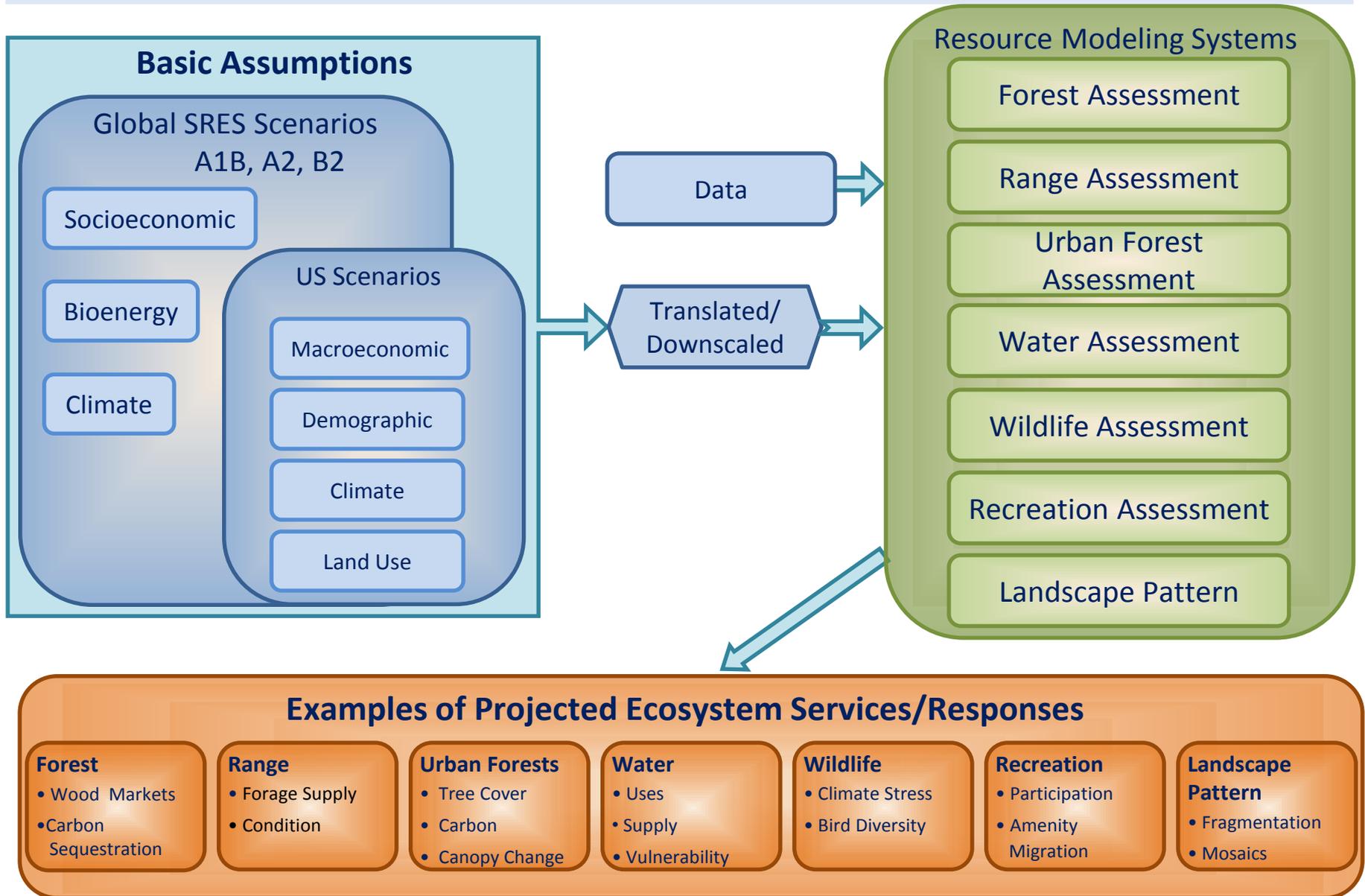


Nonfederal land use change in the conterminous United States, 2010-2060

Why multi-agency scenarios?

- Anchor for 2020 RPA Assessment, including scenarios influencing land use change, socioeconomic change, and climate change.
- Link to land cover projections and relationship between use and cover to enhance ecological analyses.
- 2020 RPA - investigating approaches to projecting landscape patterns.
- Incorporate climate change into land use projections.
- Land projections are key link to other resource effects.

Forest Service RPA Assessment



Drivers of LULCC

- Economic growth/decline patterns
- Economic returns to land uses
- Population change and pattern
- Technology and policy change - often indirect
- Natural disturbances
- Climate change

Preferred Outcomes

■ *LULCC Scenarios:*

- Nest within integrated scenarios that include demographic, economic, technology, institutional and policy change, and climate.
- Link to global analyses

■ *LULCC Projections:*

- National or (better) subnational scale by major use and cover classes that can be refined for sector-specific analyses