

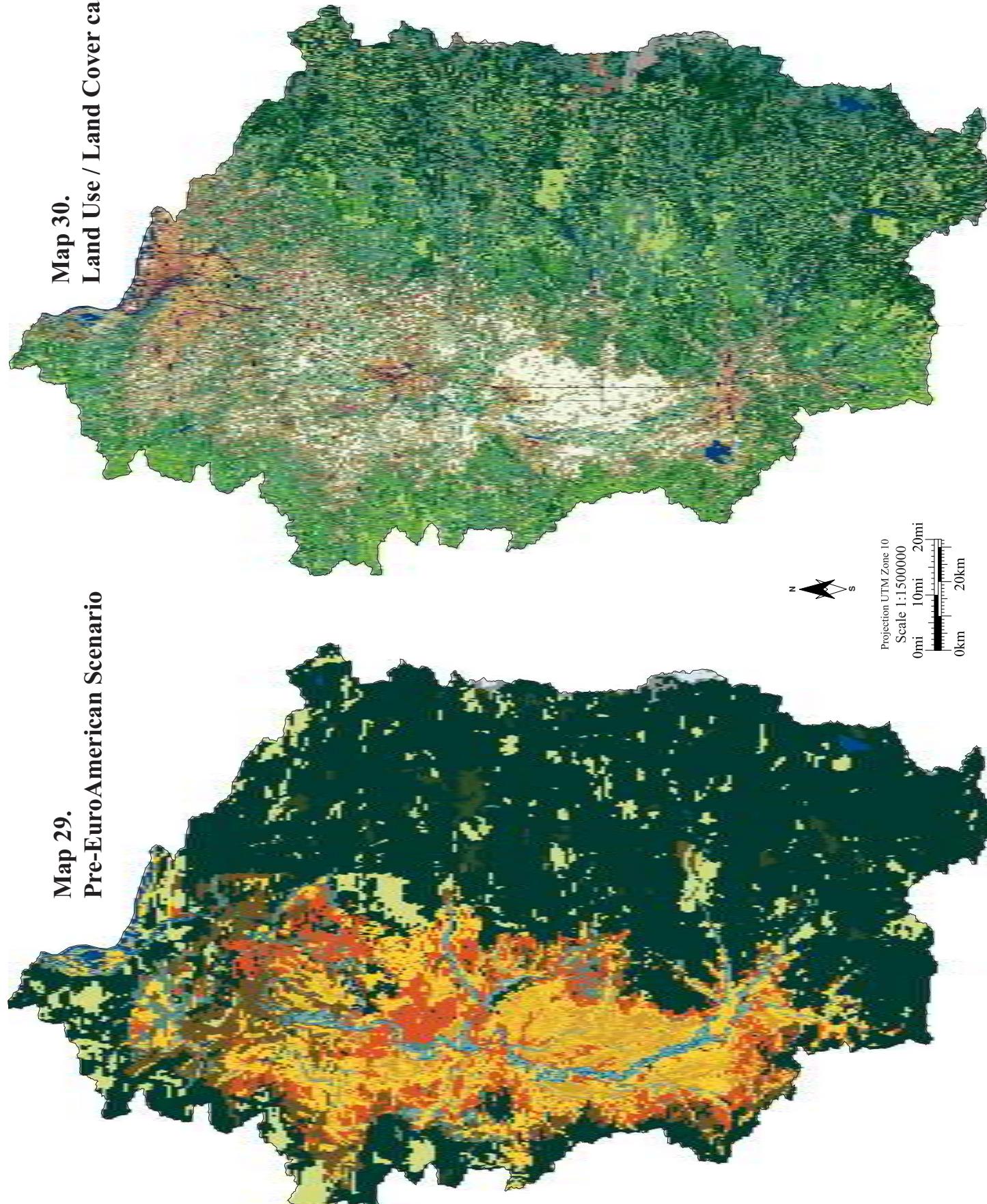
Scenario Comparisons

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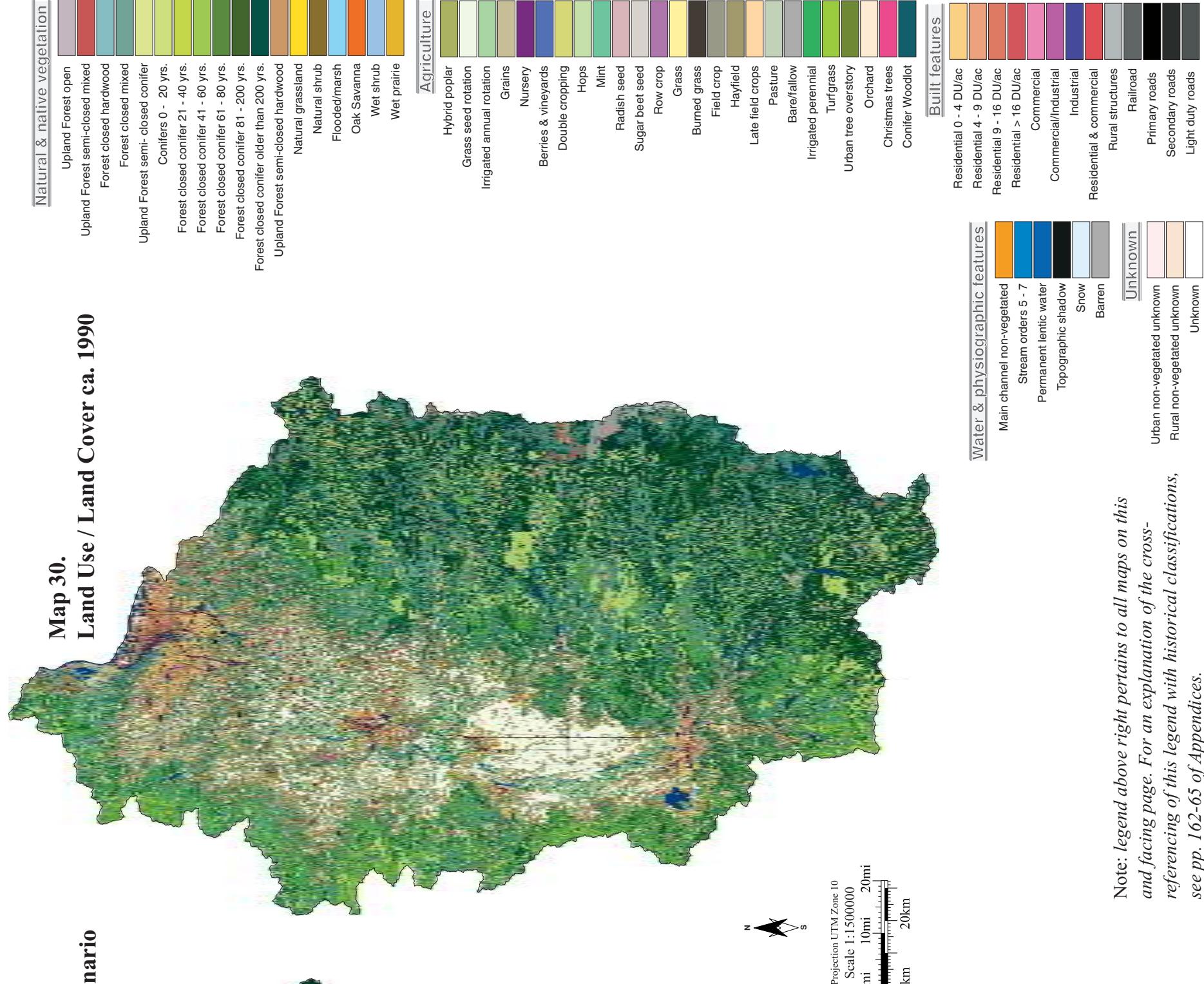
Scenario Comparisons

The preceding pages provide an overall description of each scenario. In the pages that follow the emphasis is on among-scenario comparisons. Six major components of the landscape are examined: natural vegetation, riparian areas, agriculture, forestry, urban areas, and rural residential development. For each, we describe key landscape characteristics (e.g., housing density, acres of wetlands) as well as the assumptions and methods used to generate the landscape patterns represented in the scenarios. Some landscape components involved complex computer models. For example, changes in agricultural lands are derived from a land allocation model designed to mimic the crop selection decisions made by agricultural producers. Input data included the suitability of the land for different types of crops, availability of water and crop requirements for water, a crop's expected cost and returns and, for the Conservation 2050 scenario, environmental considerations, such as pesticide and fertilizer requirements. For other landscape components, on the other hand, the process of landscape generation was relatively simple and direct. For example, in Plan Trend 2050 and Development 2050, the distribution and types of natural vegetation in the lowlands are determined largely by default. That is, the natural vegetation that occurs circa 1990 remains through 2050 as long as it is not converted to urban or rural residential development or modified by agriculture or forestry land uses.

Map 29.
Pre-EuroAmerican Scenario



Map 30.
Land Use / Land Cover ca. 1990



Note: legend above right pertains to all maps on this and facing page. For an explanation of the cross-referencing of this legend with historical classifications, see pp. 162-65 of Appendices.

Map 33.
Development 2050



Map 32.
Plan Trend 2050



Map 31.
Conservation 2050



It is impossible to predict with complete accuracy exactly where land conversions will occur, from natural vegetation to human use, or between different types of human use (e.g., agriculture to rural residential, or low density to high density housing), or from human use to natural vegetation, in the case of ecosystem restoration. For example, we cannot say for certain that houses will be built on parcels “a,” “b,” and “c,” only that houses are more likely to be built on certain types of land (e.g., with gentle slopes and adequate drainage) and in certain areas (e.g., with ready access to

major roads and employment centers). There is an element of chance that affects whether any particular suitable parcel will be converted. The methods used to generate and depict the 2050 landscapes work in a similar manner. Thus, the scenarios cannot be viewed as maps of exactly what the landscape will be like in the future if the specified policies are implemented. However, they bracket a plausible range of the overall patterns likely to occur under the corresponding scenario assumptions.