AIR

LAND

WILDLIFE

WATER

FISH

OUTDOOR RECREATION

Natural Resource Profiles

Statewide Conservation and Preservation Plan
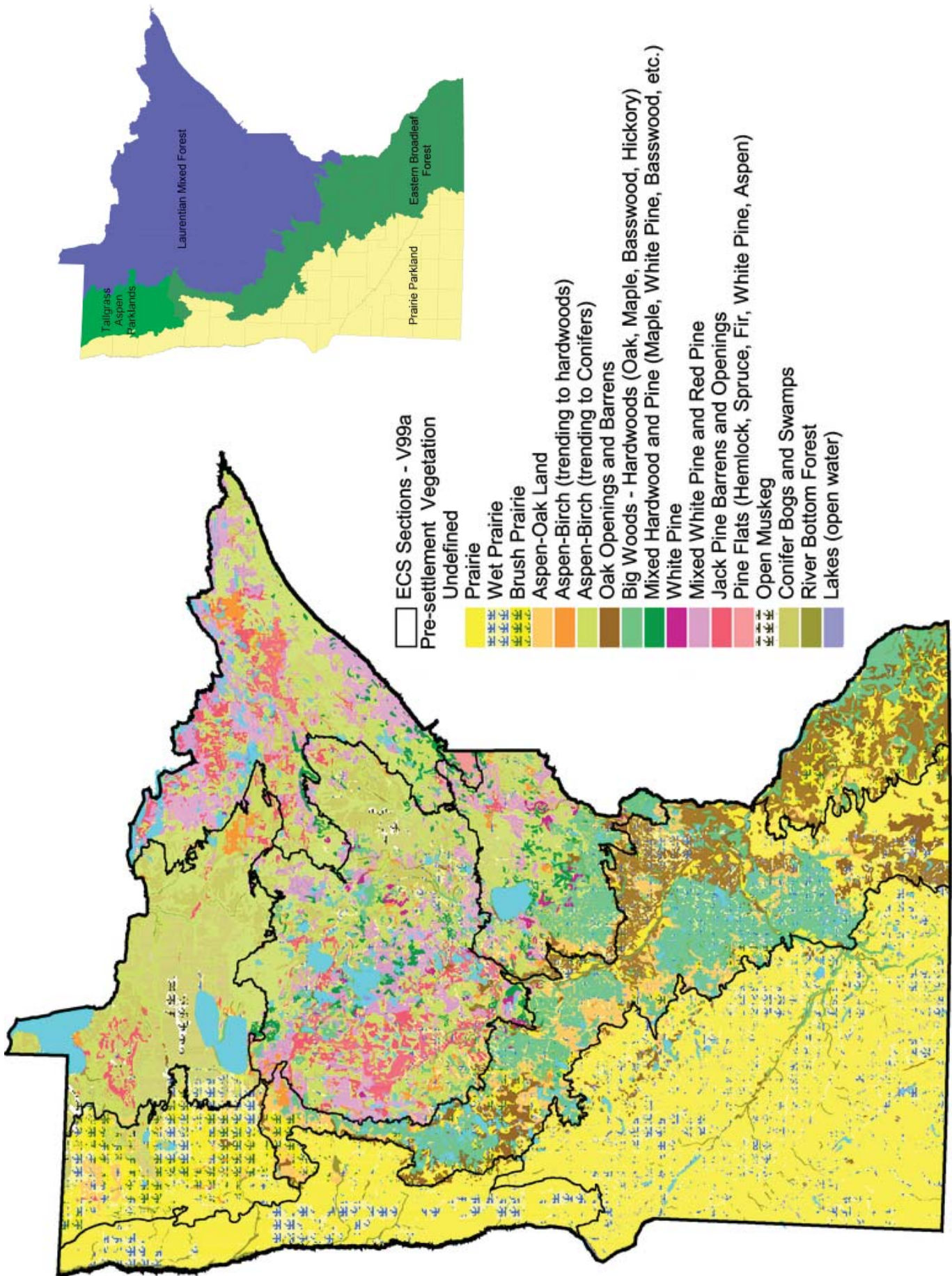*Preliminary Plan – Phase I*
July 17, 2007
Revised Sept. 20, 2007

Figure 1: Map of Pre-settlement Land Cover based on Marschner's Map. Credit: Terry Brown, University of Minnesota.

Natural Resource Profiles Overview

During the first phase of the Statewide Conservation and Preservation Plan process, project team members compiled profiles for Minnesota's natural resource areas: air, land, wildlife, water, fish, and outdoor recreation. These groups of experts reviewed existing documents and data to:

- Establish a "baseline" condition for the resource (most often, the pre-settlement condition – see Figure 1, facing page);
- Assess the current condition of that resource, and the trends that got it there; and
- Determine the "drivers of change" propelling those trends.

Understanding these drivers of change is a critical prerequisite to making science-based projections of the likely future state of the resources, and descriptions of these drivers of change are therefore a large component of the natural resource profiles that follow. As described in this section, drivers of change can be both "proximate" (i.e. close to the actual impact on the resource, such as loss of land habitat, or the loading of solids into water systems), and "higher order" (such as land development choices and climate change). Within each profile, the analysis begins with the proximate drivers of change, which are discussed starting with drivers that have the greatest overall impact on the resource followed by drivers that have successively less influence. Connections from these drivers to higher order drivers are then made.

Certain drivers such as habitat degradation show up within several resource profiles. Cross-cutting drivers are an attractive target for policy and investment actions since the benefits of these actions will flow to multiple resources. The identification of these cross-cutting drivers was a major step in forming the project's recommendations on possible issues for investigation in the second phase of the project.

As these profiles were being created, the project team was receiving input from the public via the Minnesota 2050 project and the Campaign for Conservation survey (see the Introduction). Not surprisingly, Minnesotans appear to be well-connected to their natural environment and quite conversant with the conservation issues confronting the state, as illustrated by the quotes from participants found at the end of each profile.

The general structure of each natural resource profile is:

- A short description of the history of the resource in Minnesota
- Discussion of drivers of change:
  - » Definition of the proximate driver
  - » Connection to higher order drivers
  - » Influence of the proximate driver on the resource in Minnesota
  - » Identification of gaps in knowledge and opportunities for research

"Our schools will teach and practice the needs for sustainability beginning in kindergarten"

—Minnesota 2050 participant