3. ISSUES AND KEY QUESTIONS

3.1 Introduction

This step identifies the issues that the team decided would form the focus for this iteration of the watershed analysis. This step also identifies key questions that will be answered in the course of the analysis. These questions were developed by the team to address the issues and promote synthesis among the core topics. The answers to these questions will provide managers with information needed to make decisions, implement resource programs and design projects. Core topics and questions will be addressed in the context of their relevancy to these issues and key questions.

Issues were arrived at through a process of identifying existing conditions (Step 1) and comparing these with desired conditions (Table 1):

Table 3.1-1: Results of exercise to develop issues

EXISTING CONDITION	DESIRED CONDITION
Extensive vehicle access (high road density)	"Good neighbors" coord. with private Natural sedimentation rates Roads outside riparian zones Limited vehicle access Designated access Access w/purpose One route vs. many to same place Low road density Road conditions meet use needs Roads adequate for administrative use Roads adequate for recreation demands Roads do not create fish blockage
Degraded fish habitat	Good fish habitat Stable roads Woody debris recruitment near natr'l rate Near natr'l sedimentation rates/types Natural temperature regime Flows support desired populations Near normal beaver activity Healthy riparian function Good channel/floodplain interaction Good water quality Healthy wetland function Suitable rearing habitat in Rock Creek
Varying size blocks of mature conifer and late-successional habitat	One BIG block of late-successional habitat Low disturbance level (noise, log removal, noxious weeds, etc.) Road density within NW Forest Plan standards
No harvest currently occurring on federal land	LSR boundaries that meet need to harvest timber and protect species (long-term goal) Harvest in LSR that enhances late-successional habitat
Some potential for major loss due to long, narrow strip of urban area adjacent to Forest land. Community is not prepared to respond to a major fire.	Federal agencies and community are prepared for wildfire
Human use of the Forest is high and demand is growing. May be commitments we are unaware of.	No non-native species of plants and animals Special forest products are available and use is within the ability of the ecosystem to sustain Recreation opportunities available and within the ability of the ecosystem to sustain People respect/appreciate Water quality/quantity is good Federal agencies are involved in planning of non-agency uses (mineral rights, right-of-ways, county roads, etc.)

After the above exercise was completed, the group went through the desired conditions and created issue statements that would summarize these management goals. The following issues were developed and identified for analysis during this iteration of the watershed analysis.

3.2 *Issue*: Provide stable roads and trails to the extent needed to meet public and agency needs.

The high density of roads in the analysis area is of concern for several reasons. The greatly reduced level of road maintenance on federal land poses danger to public safety and increases the risk of road failure. Roads are a major source of sediment in streams and several major road failures have occurred in the analysis area. Roads also contribute to the disturbance of wildlife and can be at variance with the goal of developing late-successional stand characteristics. Conversely, an efficient transportation system is vital to meeting the needs of private landowners, public agencies and the public at large. The effective management of roads is a basic step in restoring degraded watersheds and is one of the primary reasons for this analysis (USDA and USDI 1994c: C-32).

Key questions developed for this issue include:

What types of roads have a high potential for resource impacts?
What types of roads are likely to fail?
What types of roads are most likely to alter streamflow?
What criteria should be used to select roads for upgrading or obliteration?

3.3 *Issue*: Provide and maintain quality fish habitat with emphasis on road stability and woody debris.

Fish habitat in much of the analysis area is degraded; coho and steelhead populations are severely depressed in Drift Creek and Schooner Creek basins. Focusing management activities on providing stable roads, increasing the amount of woody debris in streams and increasing beaver populations have been identified as the most effective way to promote optimum fish production in the analysis area. These goals are in direct support of the Aquatic Conservation Strategy set forth in the ROD (USDA and USDI 1994c: B-19).

Key questions developed for this issue include:

What problems are affecting crucial fish habitat?
What are the historic levels, current recruitment levels and long-range potential of woody debris in streams?

3.4 *Issue*: Maintain desired late-successional characteristics where they exist; manage vegetation to develop late-successional characteristics where they are currently lacking.

All but 80 acres of National Forest and 771 acres of BLM land in the analysis area have been designated Late-Successional Reserves in the Northwest Forest Plan. The southern half of the analysis area includes part of the largest block of late-successional habitat on the Hebo Ranger District. This block of land, along with adjacent BLM land within the

watershed and adjacent National Forest land in the Siletz watershed, is the only late-successional forest for 20 miles to the south and for 8 miles to the east. Maintaining this existing habitat is vital to meeting the objectives of Late-Successional Reserves. The analysis area also contains approximately 10,000 acres of Federal land in young ($\leq$45 yr. old) even-aged plantations.

Key questions developed for this issue include:

What factors are preventing or inhibiting the development of late-successional characteristics?

What criteria determines which areas or stands will benefit by treatments designed to hasten the development of late-successional characteristics?

3.5 Issues Not Addressed In This Iteration

Several issues were discussed but rejected for analysis in this iteration. These include:

Within the AMA, demonstrate that timber commodities can be removed from late-successional stands, while maintaining late-successional characteristics. Because all existing late-successional habitat within the analysis area is currently within Reserve Pair Areas (RPA) for northern spotted owls, recovery plan sites for northern bald eagles, and/or suitable or occupied marbled murrelet habitat, harvest of mature timber will not be considered at this time. This issue may be addressed in a future environmental document. The ROD (D-16) has specific direction for this AMA regarding RPAs: "reserve all suitable habitat in that area from timber harvest." (USDA and USDI 1994c) The portion of the analysis area in the RPA includes all land south of the North Fork of Schooner Creek. Harvesting in mature stands north of this line (i.e., Erickson and Rock Creeks) is not recommended because it is designated critical habitat for spotted owls (USDI 1992) and marbled murrelets (USDI 1996). Mature and late-successional stands in this area provide a link to a block of late-successional habitat at Cascade Head. Rock Creek subwatershed includes one bald eagle recovery plan site and occupied murrelet sites.

Improve water quality where it is currently impaired. The Oregon Department of Environmental Quality (DEQ) has identified Devils Lake as being outside acceptable standards for algae and pH during summer months (DEQ 1995). In addition, Forest Service temperature data for the last two years indicates that Drift Creek exceeds temperature standards set forth by the DEQ. The analysis team recognizes water quality as an important issue but it will not be addressed in this iteration due to the fact that there are few management options for improving these problems. The water quality in Devils Lake is directly related to lake-side development which is outside of Forest Service or BLM jurisdiction. The causal factors for high temperatures in Drift Creek will be explored in this analysis but factors related to geologic or hydrologic features cannot be "fixed" and streamside shading on private land is also outside of agency jurisdiction. Standards and guidelines for management on federal lands ensure the retention of vegetation necessary for streamside shading. An in-depth analysis of sunlight's role in the temperature regime would require the use of a solar pathfinder or a similar method, a procedure too costly and time-consuming for this analysis.

Modify Late-Successional Reserve boundaries and/or standards and guidelines to better meet other AMA goals and objectives. Almost all of the federal land within the analysis area is designated LSR. This designation limits the pursuit of other AMA goals such as timber sales that combine the objectives of experimentation and providing economic benefits to adjacent communities. The ROD gives specific direction for the AMA:

> However, because much of the Adaptive Management Area is Late-Successional Reserve, primarily designated for a single species about which information is still being developed, the designation and/or standards and guidelines for Late-Successional Reserves may be reconsidered in the Adaptive Management Area plan. Relaxation of the Late-Successional Reserve status is not necessarily assumed; proposals will require careful analysis to assure consistency with the Endangered Species Act and National Forest Management Act requirements, new marbled murrelet information, and overall objectives of these standards and guidelines. In the interim, the maximum age for thinning within Late-Successional Reserves in this Adaptive Management Area is 110 years. (USDA and USDI 1994c: D-15)

This issue will be deferred to the LSR assessment scheduled for development in 1997.

Maintain and Restore functional components and processes within riparian areas and wetlands. The maintenance and restoration of riparian and wetland areas is another key requirement of the Aquatic Conservation Strategy (USDA and USDI 1994c: B-10). Riparian conditions as they relate to healthy fish habitats will be covered under the issue dealing with fish. The bulk of wetlands in the analysis area are on private land or within the Siletz Bay National Wildlife Refuge. Given time constraints, lack of information on these habitats and the limited opportunities for restoration on FS or BLM land, this issue will not be dealt with in depth during this iteration.

Federal agencies and communities are prepared for wildfire. Lincoln City is essentially a long, narrow strip of developed land between the Pacific Ocean and the forest land that occupies the rest of the analysis area. A wildfire driven by an east wind could have devastating effects on this community. Currently there is no coordinated plan between the federal, state and local agencies for this area. Such a plan should consider access for fire management. It was decided that the expertise and amount of time needed for agency representatives to meet and formulate plans was outside the scope of the team's ability and time frame. However, the team recognizes this as a serious need and recommends that management pursues this outside the watershed analysis process. The ROD (USDA and USDI 1994c: C-11) states that LSR assessments should generally include a fire management plan.

Concerns about the occurrence and spread of non-native plants and animals. Concerns and problems related to non-native species will be identified under Steps 3 and 4 of this document and considered in specific recommendations e.g. the use of native plant species in restoration projects, the need for specific eradication programs during wetland restoration, etc. The team felt that this issue would be adequately addressed by this approach.

Concerns about the growing demand for special forest products. The team felt that the current Forest-wide environmental assessment for special forest products and direction in the ROD adequately address this issue.

Concerns about the growing demand for recreation opportunities in the analysis area. The area's proximity to the Willamette Valley and the Pacific Ocean seem to make the demand for more recreation opportunities in the analysis area inevitable. However, scoping did not reveal any significant public demand for more recreation opportunities. In addition, Forest Service recreation budgets have steadily decreased and it would be unrealistic to propose major additions to the recreation program at this time. The emphasis on managing this area for late-successional habitat should also temper expectations for recreational development. The current status of recreation in the analysis area will be discussed under Steps 3 and 4 and the public's use of roads (and the possibility of converting roads to a trail system) will be considered in recommendations for managing the transportation system.

Concerns about the need for more cooperation with other public agencies and private landowners. The ROD (D-2) states:

> ...Innovation [in AMA's] in integration of multi-ownership watersheds is encouraged among federal agencies and is likewise encouraged among state and federal agencies, and private landowners. (USDA and USDI 1994c)

Much of this is outside the actual process of watershed analysis and will be addressed in the Northern Coast Range Adaptive Management Area Guide developed jointly by the Forest Service and BLM. Management recommendations within this analysis will identify opportunities for joint restoration efforts between landowners where they exist.

Isolated parcels of BLM land in this watershed could be exchanged for isolated parcels of National Forest System lands elsewhere to improve management efficiency of this LSR and AMA. This should be addressed in the AMA Guide or LSR assessment.