

Guide to Management Unit Delineation

The video *Understanding the Big Picture* identifies some fundamental tools important in developing any Stewardship plan. The next step in the Stewardship planning process is to determine which parts of the property are best suited to meet your ownership goals.

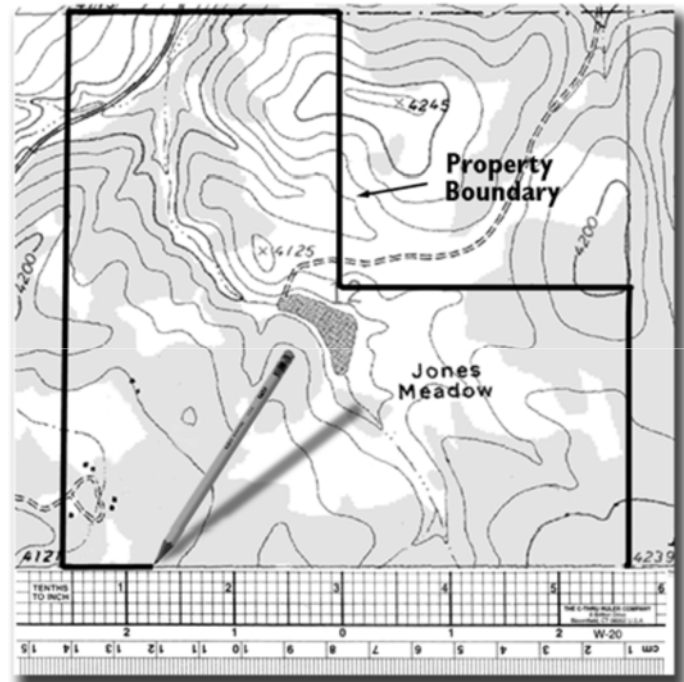
Topographic maps and aerial photographs or satellite imagery help to identify parts of the forest with different biological characteristics and physical features. The influence of climate, elevation, slope and aspect, access and past management practices determine how one forest area may differ from another. These differences often determine how well a forest area is suited to meeting specific ownership goals. It is helpful to determine which parts of a forest area share common characteristics. We identify these areas as *Management Units (MUs)*.

You were provided with a JMR contour map and photo with management units. The management unit boundaries were determined after the Joneses considered many different biological features and physical characteristics they felt were important.

The division of an ownership into management units is an individual decision. It is influenced by the nature of the ownership, and the criteria the owner thinks are important. It is important to divide the property into smaller sized manageable pieces with definable characteristics. Management unit boundaries can be changed as the Stewardship planning process continues.

How do I begin?

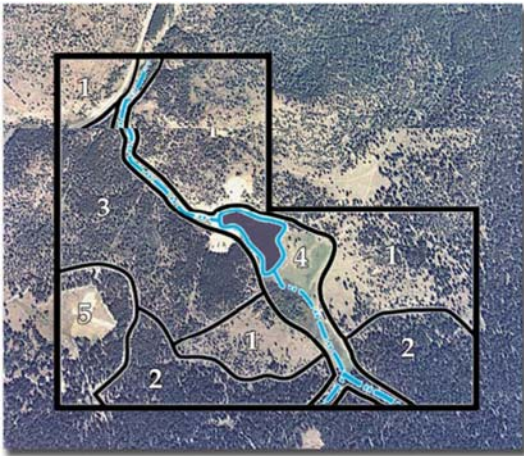
1. Gather your tools: topographic map, aerial image and overlay, legal description handout, and completed goals worksheet.
2. The property boundaries are provided for you on your maps. They were attained through the MT Cadastral website. You might find some property lines are not exactly correct and you can correct them using a pen or markers. Your property legal description (Township, Range, section e.g. T13N R15W S12) is at the top of each map along with the name of the quadrangle map used for the topographic map (in capital letters).
3. Place the clear overlay over your photo (you might want to use a couple paper clips to hold it in place) then use the wet erase markers provided in your packet to draw your MUs. Look for areas within your property boundaries that fit MU criteria you choose to emphasize. You might use geographic boundaries such as roads, streams, or ridges for your MU boundaries. Another way to delineate your MUs is to look for different tree structures; large old trees, areas of young seedlings



and saplings, meadows, riparian area, or stands of scattered trees. Your MUs may also be determined by your objectives. For instance one MU may be around your home or proposed home site, another might be the riparian areas, and others may include stands of trees of similar density, species, and size classes.

4. When you consider management planning you will evaluate and manage each MU individually. Each MU can be inventoried separately. Keep MUs large enough to manage on an individual basis but don't make them so large they are unmanageable.
5. Use the JMR Management Unit descriptions below for ideas that might parallel your thoughts when you delineate your own management units.

Management Unit 1 has scattered trees of different sizes and an open forest. The primary aspect is west and south; it appears fairly dry. The Joneses know the area is used by elk during the winter. Most livestock grazing occurs in this area during the summer. Road access is fair. Notice that the management unit boundary includes three similar areas. The Joneses think all three areas have the potential to meet similar goals.



Management unit 2 has no road access, moderate slopes, and a northern aspect. Rough texture on the aerial photo indicates trees of many sizes. The Joneses believe the area has the potential to provide habitat for various kinds of wildlife as well as periodic income from timber harvests.

Management unit 3 has smooth texture and a dense appearance, which suggests the area may be thickly forested with smaller trees. The MU has a consistent slope and aspect. The Joneses think there may be potential to improve both the forest growth and livestock forage in this area.

Management unit 4 delineates a stream and adjacent wet areas separately. Special laws designed to protect streams and wetlands will influence what and how management activities can occur in this area. This riparian area has special importance for wildlife and water quality protection.

Management unit 5 is the area around the ranch headquarters. It is set aside for activities such as fire protection. In this MU, vegetation control and maintenance may be a management objective.