

Classification Issues

The following list contains questions, concerns, and comments posed during the "classification portion" of the Land Cover/Land Use Work Group Meeting.

The classification committee should address these issues.

1. In the updated product, we need to be assured that "change" is a result of LC/LU change, not a result of a change in the classification scheme
2. Intermediate steps to correct the 1978 data need to be better defined
3. Is the minimum mapping unit (currently a 200 ft. buffer around pre-existing polygons, or 2 1/2 acres for new polygons) still appropriate?
4. Should we be addressing Land Use or Land Cover?
5. We must develop standards, so that LC/LU is interpreted the same by different interpreters
6. Should we map beyond 3 levels of hierarchy? (MIRIS I vs. MIRIS II)
7. In many places, very little has changed, making "updating" very easy
8. Definitions from the "green book" (MIRIS I, 1978) need to be "tightened"
9. Particular issues to address:
 - Forestry vs. housing ("points in the woods" - homes located in the midst of forest land, particularly in Northern Michigan)
 - Beachfront property - "shorelines" or "residential?"
 - Increase in "mobile homes" (double-wides, triplexes, etc.) - do we need to add more classes to our system?
10. 1978 problems:
 - Are problems the result of the system or the interpreter?
 - Wetlands issue (forest or wetland? Should "wetland" be a "land use / land cover?")
 - Should large stadiums and local parks be in the same class?
 - It is difficult to interpret beyond a level 3 classification
11. Suggestion: Identify change (using one of the methods below) and then start from "scratch" with the LC/LU mapping
 - Sample points - attain a statistical value of change
 - Polygon by Polygon change (spatially explicit, time consuming, but, according to many "attendees," it is needed)
 - Compositional (compare acreage by class, disregarding slight differences)

Land Use and Land Cover Classification System

Considerations:

Levels I and II should be compatible (either directly or by appropriate recoding) with the USGS system whenever possible.

Levels III and IV should be taken from the Michigan Land Cover / Use Classification System (Mich. LC /LU or “Green Book”) whenever possible.

Since the entire state has been mapped using the Current Use Inventory Classification System (CUI), every effort should be made to make revisions compatible with that data.

- Note - the CUI is a subset of the Mich. LC / LU, unfortunately, some of the category numbers and category definitions were changed.
- the Land Cover/Use Classification System, Version II (Ver II), adds additional numbers and categories to the CUI, again, some category numbers and definitions have been changed compared to the Mich. LC /LU.

Nomenclature should be standardized as much as is possible.

- Note – some categories are called by different names in each of the four systems (USGS, Mich. LC / LU, CUI, and Ver. II).

The classification of vegetation and wetlands should be made compatible with the Federal Geographic Data Committee Standards whenever possible.

- National Vegetation Classification Standard (FGCD-STD-005)
- Classification of Wetlands and Deepwater Habitats of the United States (FGCD-STD-004)

Level IV categories for Urban & Built Up should be compatible with the Land-Based Classification Standards (formerly the Standard Land Use Classification Manual) of the American Association of Planners and the North American Industry Classification System (formerly the U.S. Standard Industrial Classification System) of the U.S. Census Bureau whenever possible.

When existing categories are subdivided, assuming this isn't accounted for in the Mich. LC / LU, the new categories should be at a lower level than the original category. This procedure permits the two new categories to be aggregated for comparison with the older, single category.

Category definitions should NOT be redefined. This can lead to the inability to make accurate comparisons of change for that category.

If category definitions need to be adjusted, it should be done considering all the above points. Refer to the “Green Book” whenever possible.