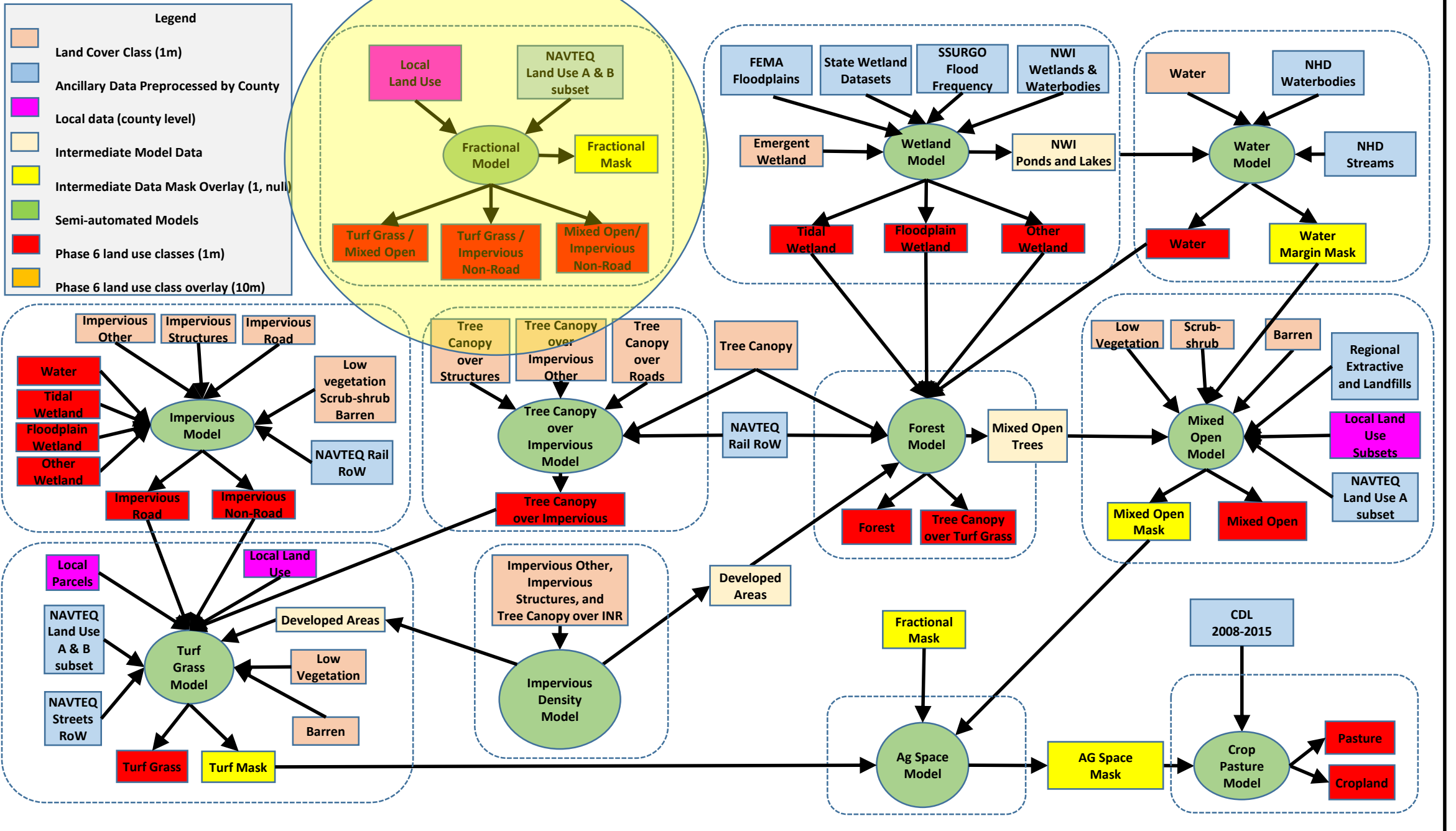


Fractional Land Uses

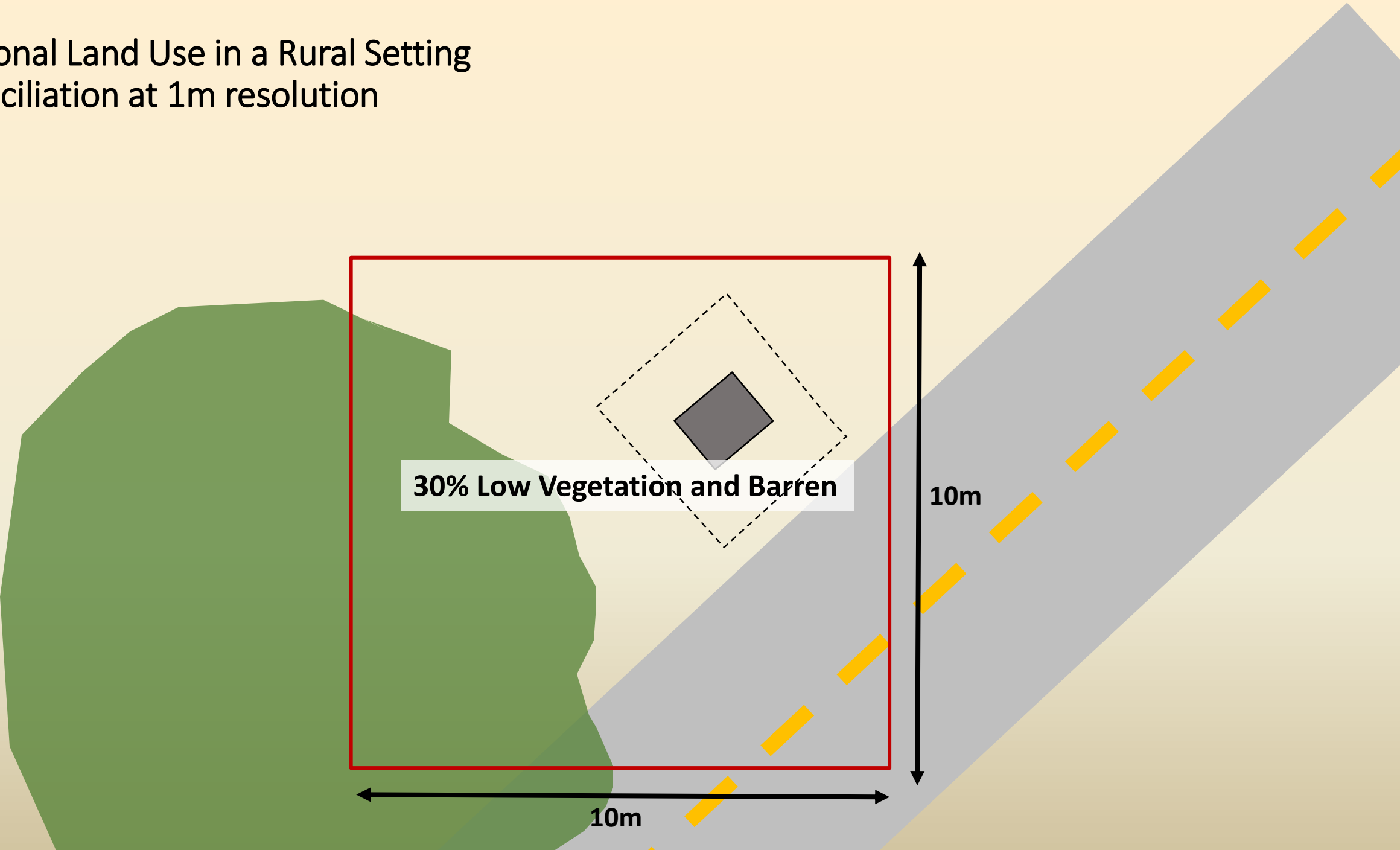
Peter Claggett, USGS

May 4, 2016
Land Use Workgroup Call

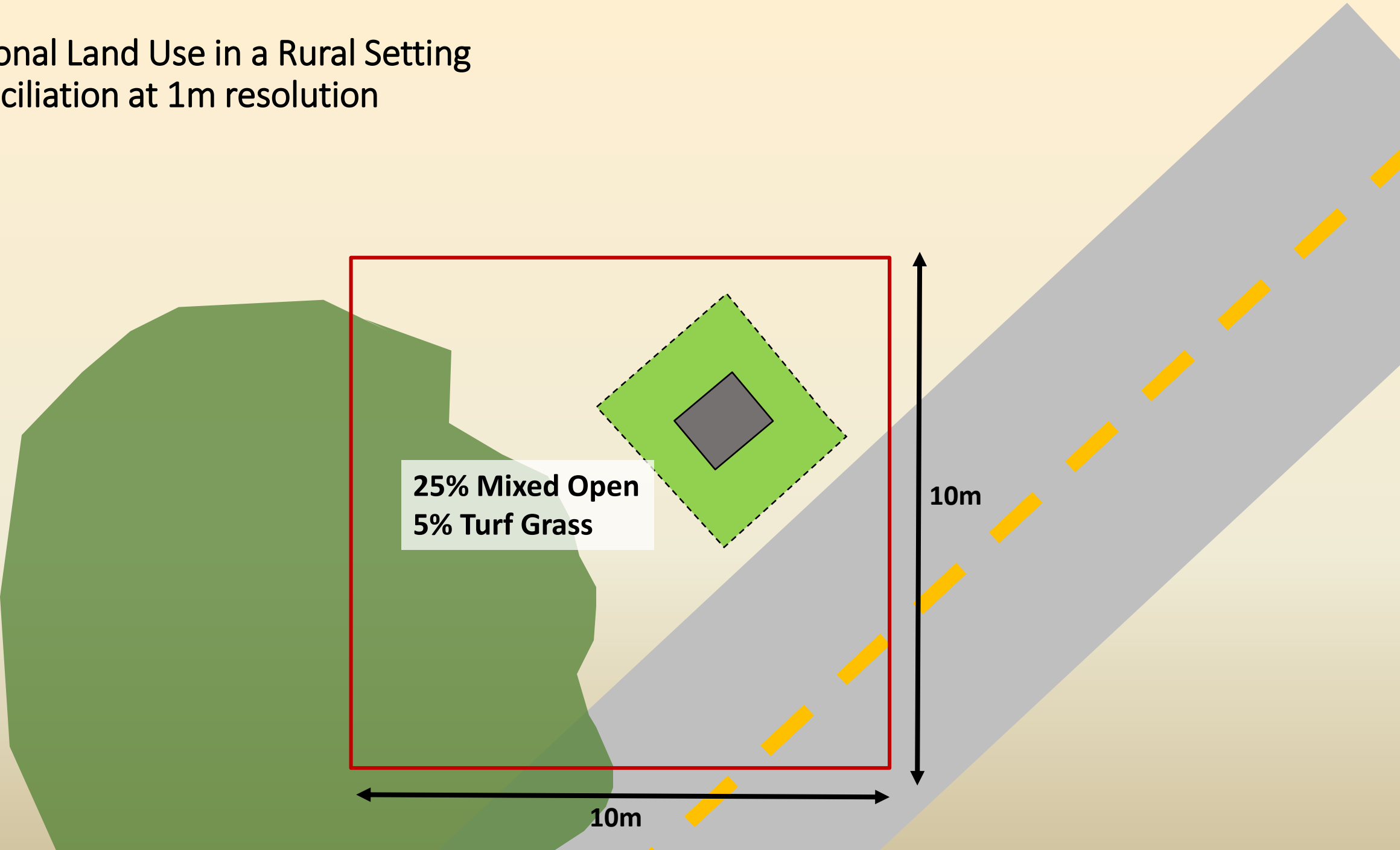
Phase 6 Land Use Development Process 050416 - Modified



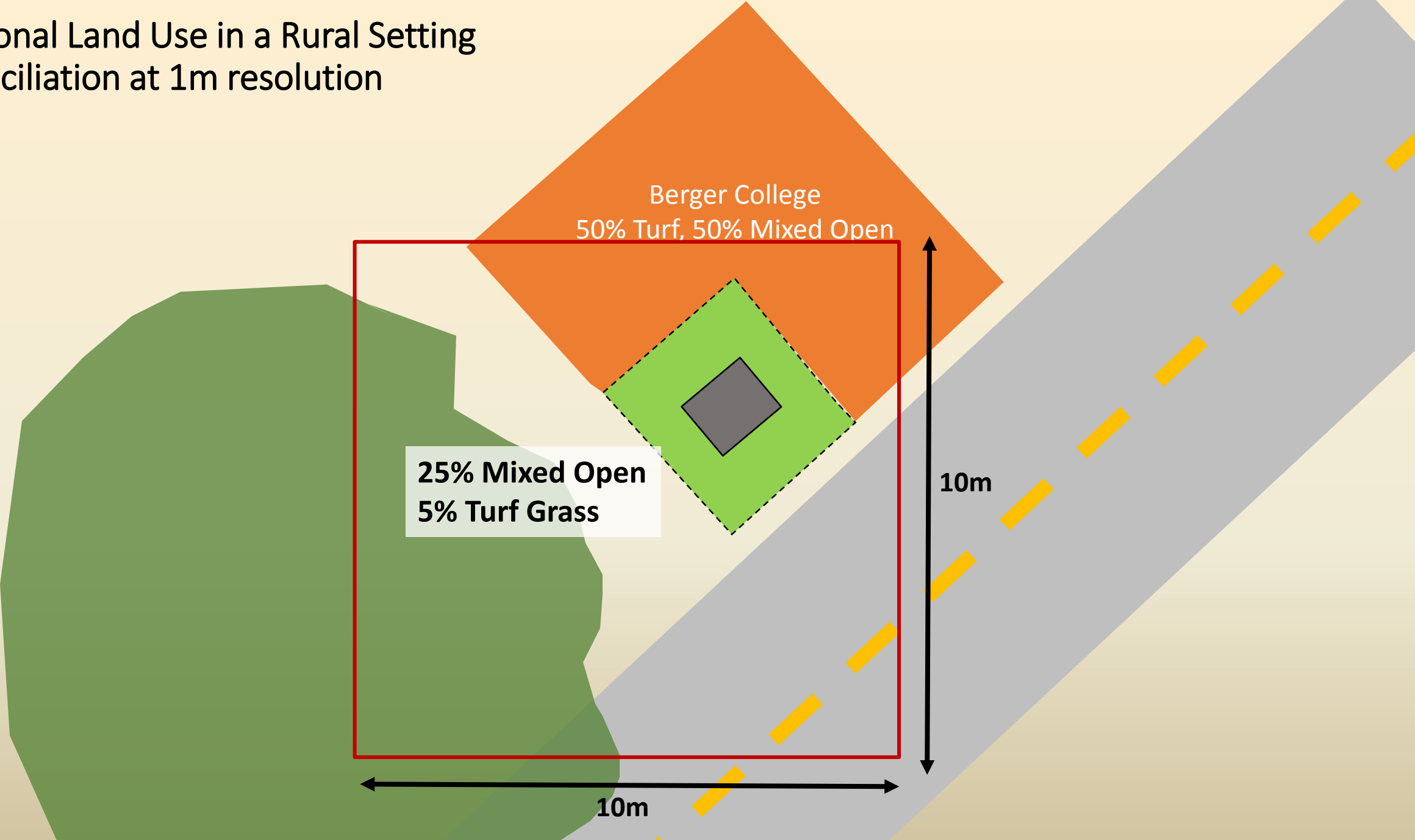
Fractional Land Use in a Rural Setting
Reconciliation at 1m resolution



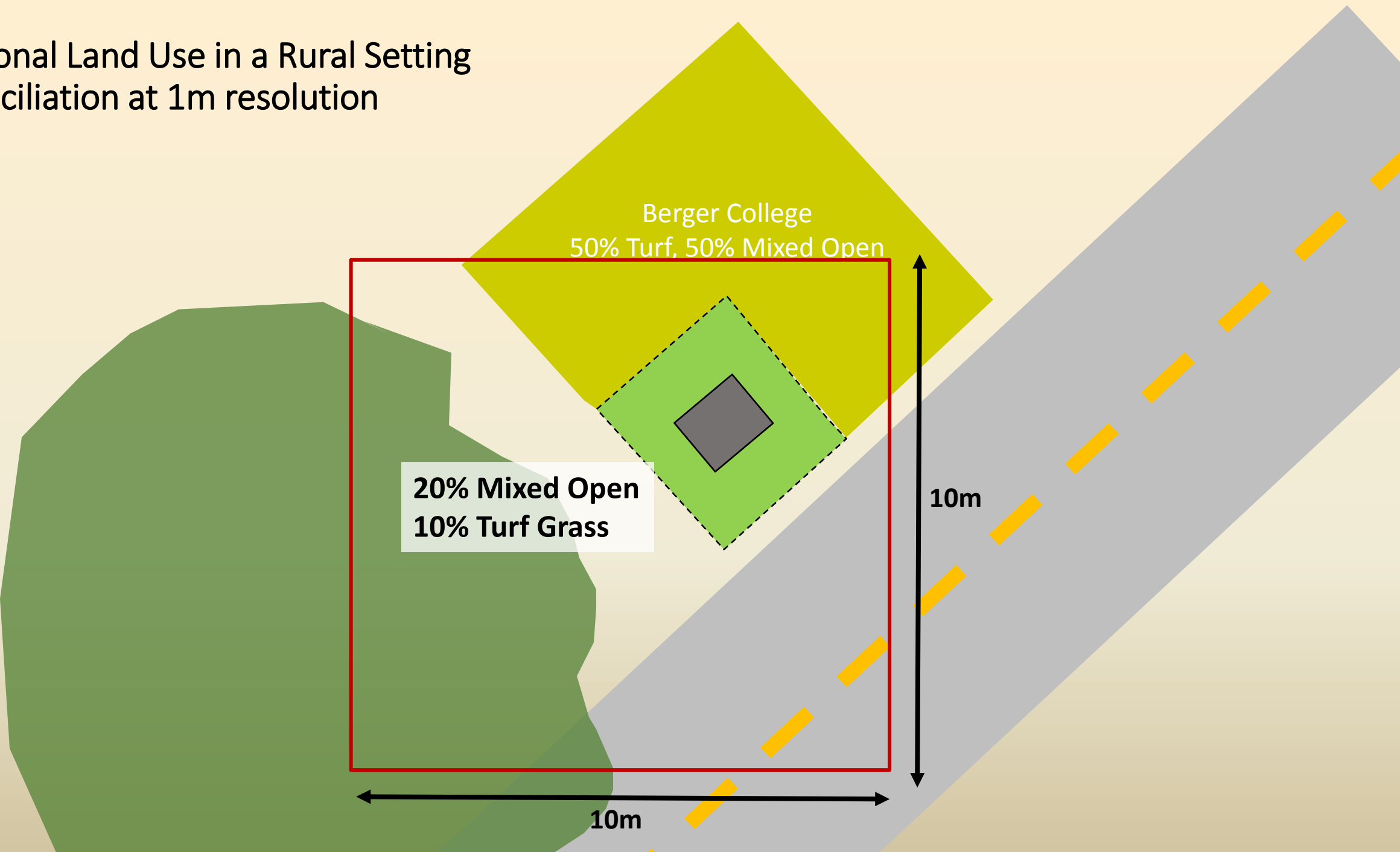
Fractional Land Use in a Rural Setting
Reconciliation at 1m resolution



Fractional Land Use in a Rural Setting
Reconciliation at 1m resolution



Fractional Land Use in a Rural Setting
Reconciliation at 1m resolution



Problem: How to Classify Barren and Low Vegetation Land Cover within different “Land Uses”

Classify as 100% Turf Grass

Class Name	Rationale
Mixed Single/Multi-unit Residential	Most likely lawns
Single Family Dwellings	Most likely lawns
Multi-family dwellings	Most likely lawns
Mobile Homes	Most likely lawns
Retail, wholesale, professional	Most likely lawns
Other Commercial	Theaters and hotels where pervious is maintained
Parking Lots	Most likely lawns
Marinas/Port Facilities/Docks	Most likely lawns
Other Urban	Most likely lawns
Recreational	Most likely lawns
CAFOs	Most likely lawns
Farmsteads	Most likely lawns
Cemetery	Most likely lawns
Sports Complex	Most likely lawns
Hospital	Most likely lawns
Seaport/Harbor	Most likely lawns
Shopping Centre	Most likely lawns
Amusement Park	Most likely lawns
Animal Park	Most likely lawns
Golf Course	Most likely lawns
Road Right-of-Way	Most likely lawns

Problem: How to Classify Barren and Low Vegetation Land Cover within different “Land Uses”

Classify as 100% Mixed Open

Class Name	Rationale
Other transportation/utilities	Pervious is minimally maintained
Utilities	Pervious is minimally maintained
Herbaceous Rangeland	Pervious is minimally maintained
Shrub/Brush Rangeland	Pervious is minimally maintained
Mixed Rangeland	Pervious is minimally maintained
Beaches	Pervious is minimally maintained
Inland sandy areas	Pervious is minimally maintained
Extractive	Mix of quarries (permitted) and abandoned mines
Vacant lots	Pervious is minimally maintained
Waterbody margins	Barren is associated with exposed shorelines during low water

Classify as 100% Non-Road Impervious Surfaces

Class Name	Rationale
Railroad Right-of-Way	Pervious is compacted and graded promoting runoff

Problem: How to Classify Barren and Low Vegetation Land Cover within different “Land Uses”

Classify as Fractional: Turf Grass/Impervious; Turf Grass/Mixed Open; or Mixed Open/Impervious

Class Name	Fraction	Components	Rationale/Notes
Vehicle Related	50:50	TG:INR	Pervious is likely compacted
Junk/Salvage	50:50	TG:INR	Pervious is likely compacted
Warehouses and Temp. Storage	50:50	TG:INR	Pervious is likely compacted
Industrial	50:50	TG:INR	Pervious is likely compacted
Railyard	50:50	TG:INR	Pervious is likely compacted
Transitional	50:50	MO:INR	Pervious is likely compacted, grass not yet planted
Communication Antennas	50:50	TG:MO	Pervious is minimally maintained
Mixed Urban	50:50	TG:MO	Pervious is minimally maintained
Institutional/governmental	50:50	TG:MO	Pervious is minimally maintained
University/Colleges	50:50	TG:MO	Pervious is minimally maintained
Military Bases	50:50	TG:MO	Pervious is minimally maintained
Parks	50:50	TG:MO	Pervious is minimally maintained
Monuments	50:50	TG:MO	Pervious is minimally maintained
Federal Facilities	50:50	TG:MO	Pervious is minimally maintained
Large Parcels	50:50	TG:MO	("Acres" >10 AND "PCT_IMP" >=0.1)

Every Unique Combination of Fraction and Components becomes a new “land use” on the map.