

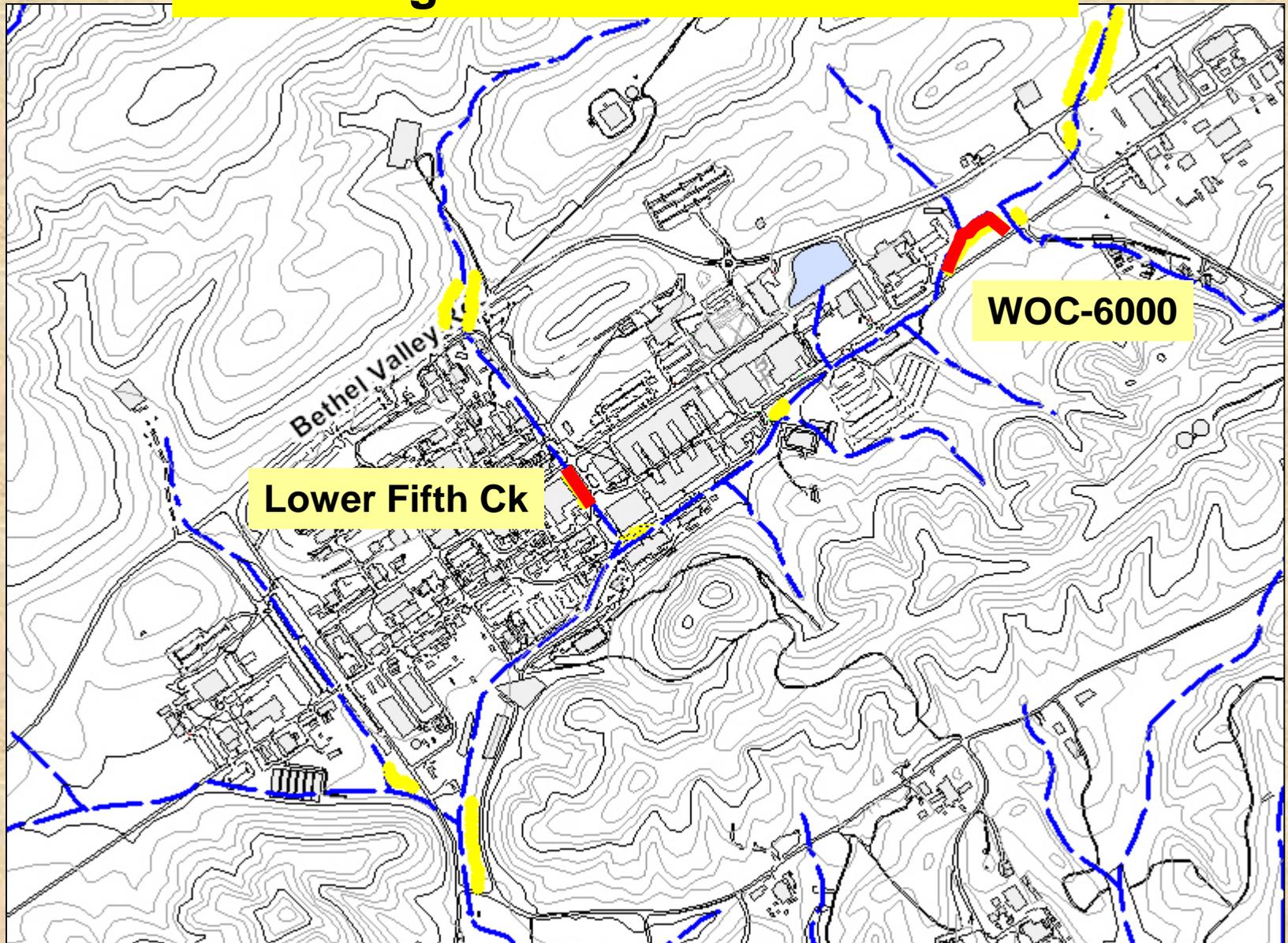
# Restoration of White Oak Creek Watershed Riparian Buffer Zones

- To expand vegetation cover in stream buffer zones in White Oak Creek watershed
- Selected areas will be actively planted with trees, shrubs, or native grasses
- Selected areas will be allowed to passively expand existing vegetation through reduction of mowing

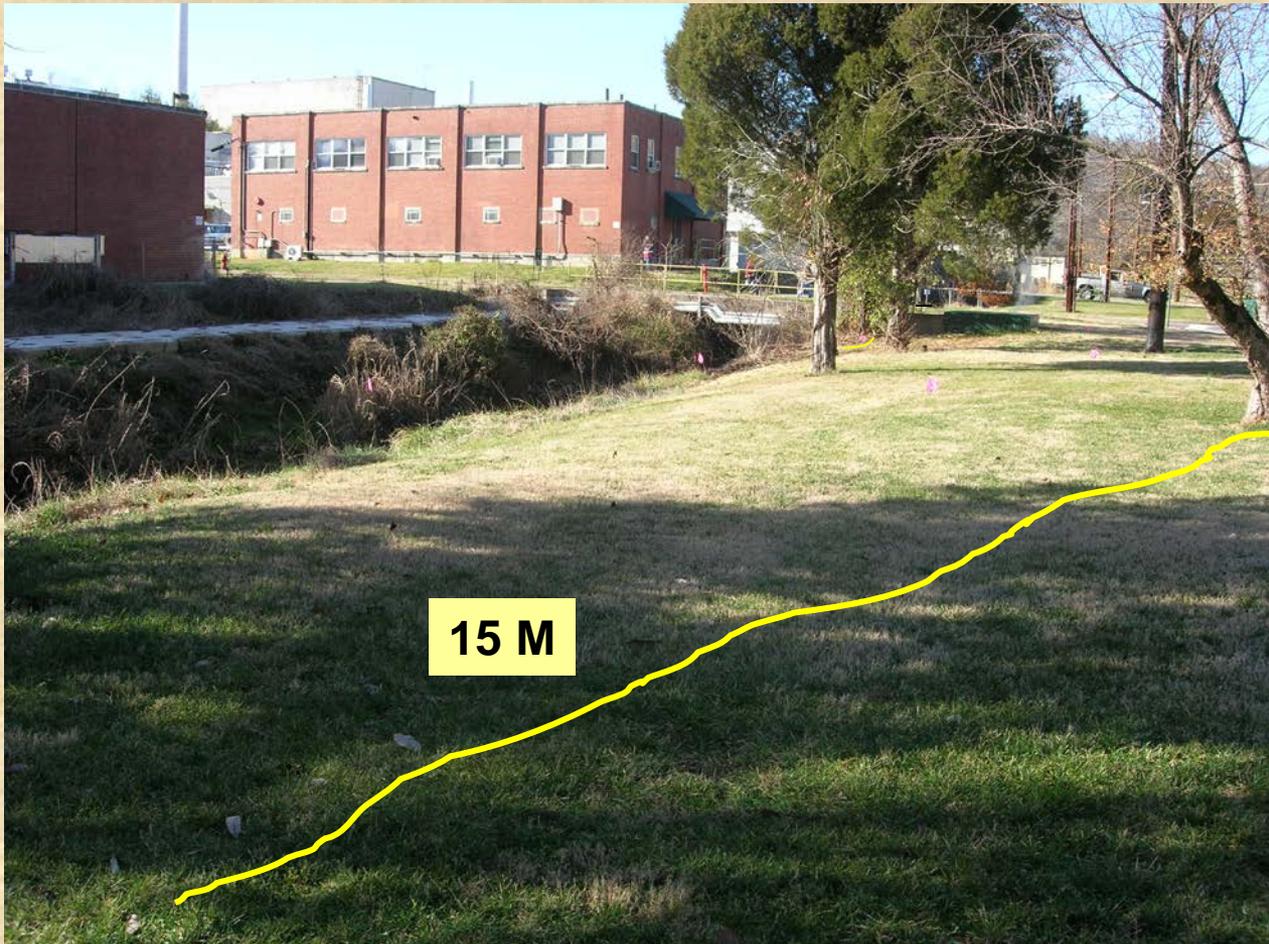
# Riparian Buffer Zones

- Natural **vegetation corridor** along stream channels
- Generally **the wider** the buffer **the better** (filters pollutants, provides wildlife habitat, shelters stream processes)
- ORNL Guidance is for a **minimum buffer width** of **50 ft (15 m)** on each side of stream; 100 m width is common guidance for best protection
- Best design is for **trees and shrubs** (for at least half of the buffer width) with a **grass** filter strip at the outer edges

# Areas targeted for active restoration



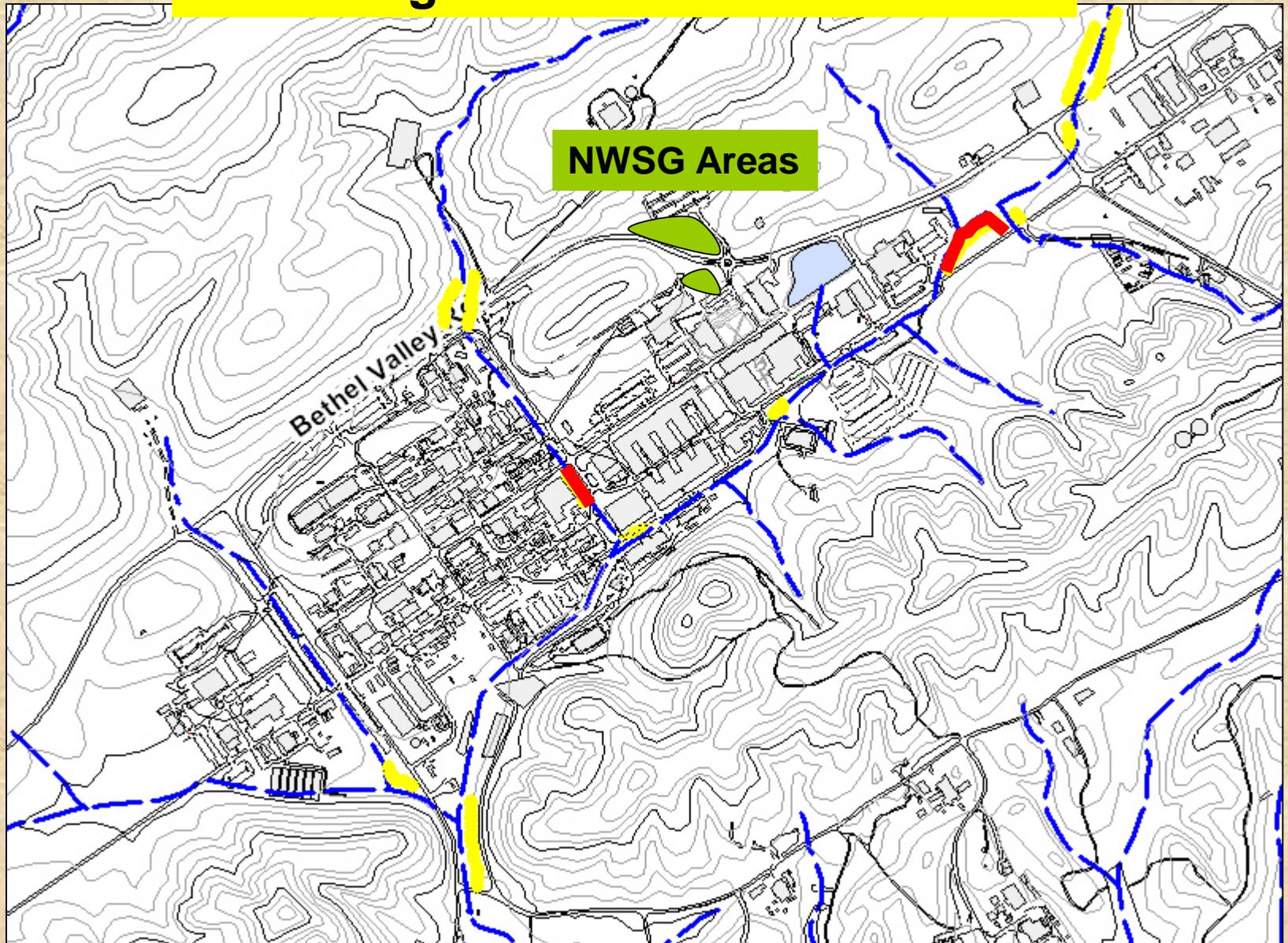
# Lower Fifth Creek projected buffer zone



# White Oak Creek – 6000 Area projected buffer zone



# Areas targeted for active restoration



# Conference Center Basin and MRF Native Grass Buffer



**Small areas with single trees**

# Basin and MRF Native Grass

- Design will include mowed fescue buffer of 5-20 ft in width
- Native Grass Mix will include short grasses and variety of wildflowers
- Native Grass Mix will be planted between road buffer, basin, and parking lot



**Example of design**

# Plant with Mix of Native Grass and Wildflowers

