

# **Battle Creek Watershed Based Plan**

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Timber Regulation and Forest Restoration Program

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# Project Elements

- Assessment
- Watershed Based Planning
- Implementation of Pilot /  
Demonstration Project

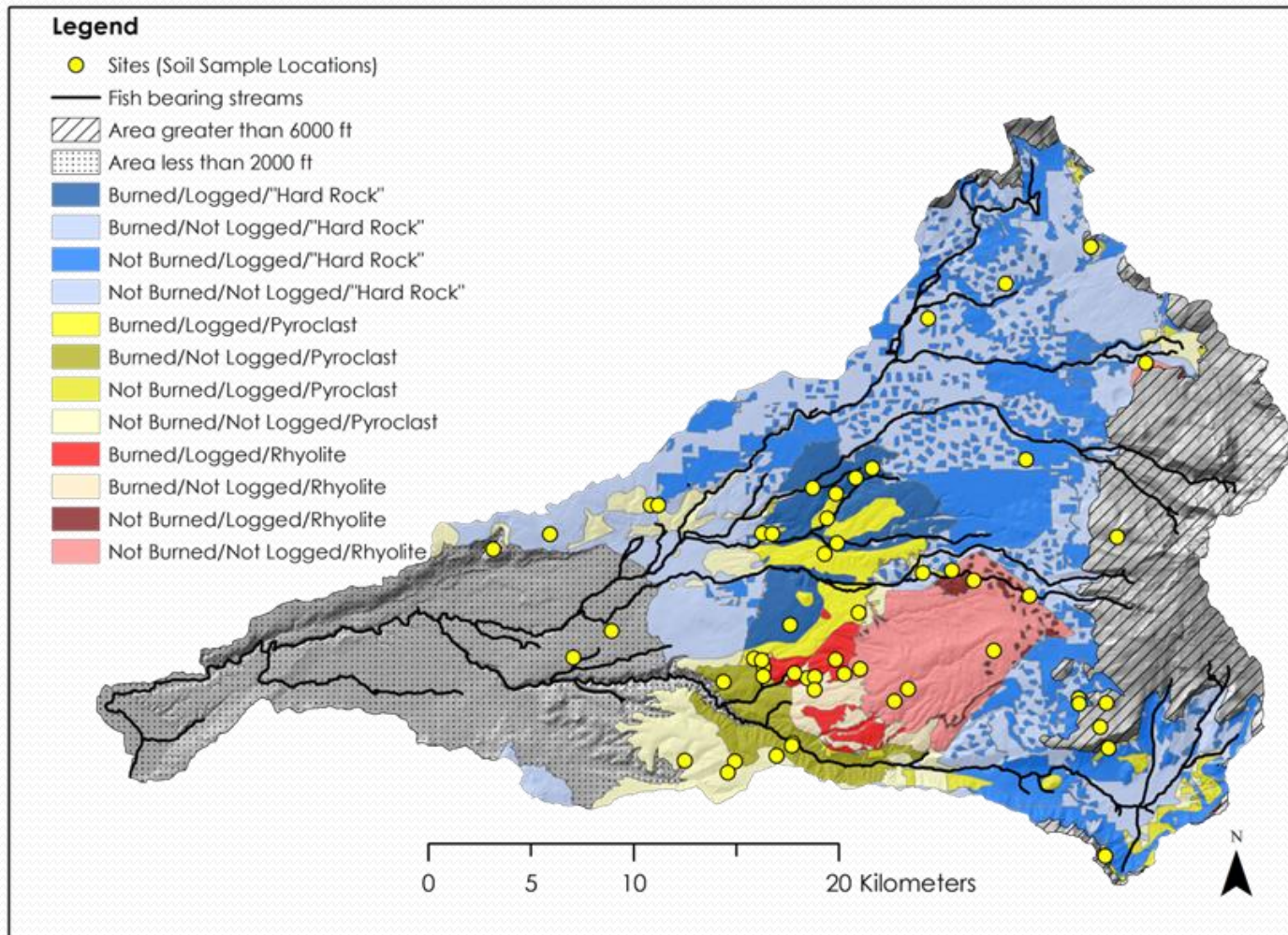
# Assessment

- Watershed-Based Plan to be founded on an assessment of the sediment dynamics of the watershed
- The Watershed Assessment will:
  - Identify sources and factors influencing sediment production
  - Quantify the relative contribution of each source to overall sediment production

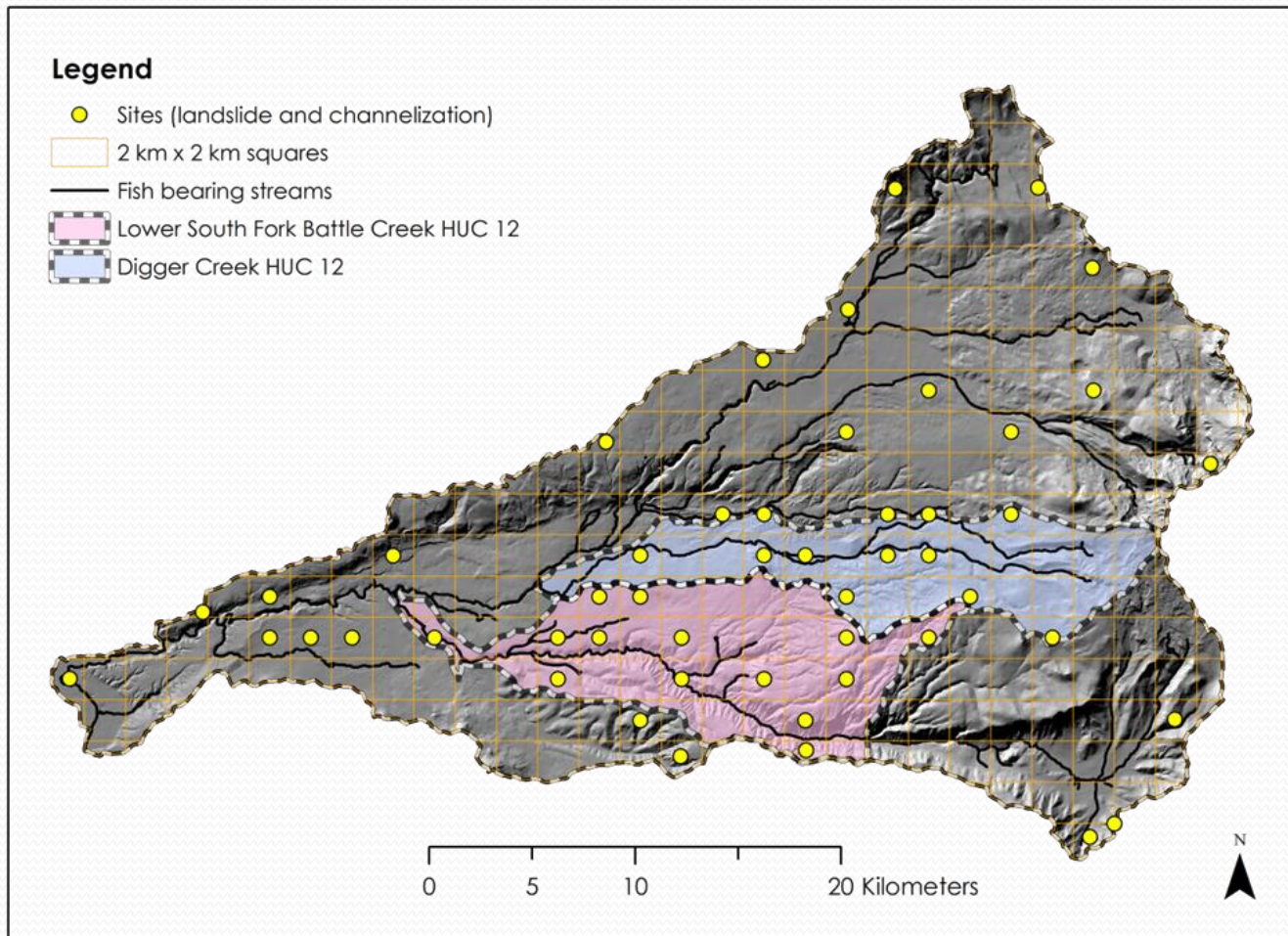
# Assessment Elements

- Quantify erosion rates for five sources of sediment:
  - Soil Erosion
  - Channelization
  - Landslides
  - Floodplains
  - Unpaved roads
- Quantify changes in Land Use and Land Cover
- Quantify Stream Condition using the Surface Water Ambient Monitoring Program (SWAMP) protocol

# Soil Erosion Sample Site Selection



# Channelization and Landslide Sample Site Selection



# Watershed Based Planning

- Structure: Nine minimum elements for watershed based plans
  - EPA requirement to qualify for 319h funding
- Focus:
  - Sediment Threats
  - Wildfire / Forest Health Threats
- Novel Approach:
  - Partnership with CVRWQCB through MOU

# Nine Element Planning

1. Identify causes and sources of pollution
2. Estimate pollutant loading into the watershed and the expected load reductions
3. Describe management measures that will achieve load reductions and targeted critical areas
4. Estimate amounts of technical and financial assistance and the relevant authorities needed to implement the plan
5. Develop an information/education component
6. Develop a project schedule
7. Describe the interim, measurable milestones
8. Identify indicators to measure progress
9. Develop a monitoring component

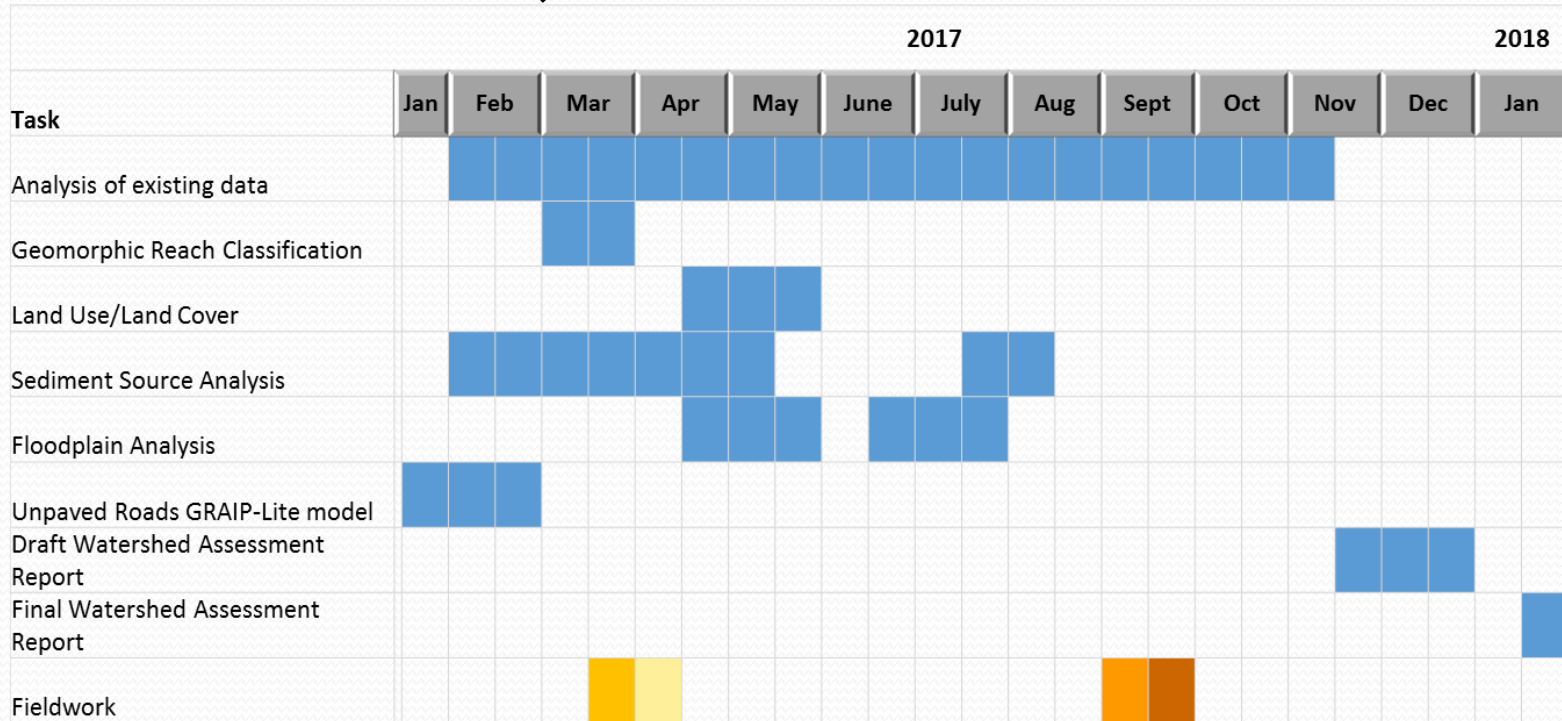
*(Source: EPA 2013. A Quick Guide to Watershed Management)*








# Implementation

- Pilot / Demonstration Project
- Forward Tree Farm:
  - **Vicinity:** Where Forward Road nears Digger Creek
  - **Goal:**
    - Implement recommendations of the Cooperative Forest Management Plan
    - Correct major drainage problems and stabilize soils in an area burned by the Ponderosa Fire of 2012.
  - **Scope:**
    - Abandon old road segment (0.2 miles) of and construct of new road to access the intake to the Boole Ditch (0.4 miles)
    - Rocking of Watercourse crossings

# Project Schedule



	GRAIP-Lite validation
	Soil sample collection
	Landslide and gully mapping validation
	LU/LC analysis
	Analysis