SOUTH FORK NEGRITO CREEK SUBWATERSHED (NORTH FORK CONFLUENCE TO HEADWATERS)

TMDL reach length: 14.5 mi; **Subwatershed area:** 50 sq. mi.
Elevation range: 5800–8000 ft.
Watershed cover: 84% forested; 15% rangeland; 1% agricultural
Watershed management: 98% USFS (Reserve RD); 2% private
Wilderness: none
Counties [SWCDs]: Catron [San Francisco]
TMDL: http://www.nmenv.state.nm.us/swqb/Temperature_TMDL_in_South_Fork_of_Negrito_Creek_11-05-01.pdf
Record of Decision: http://www.nmenv.state.nm.us/wqcc/303d-305b/2004/AppendixB/2004-2006ROD.pdf
WQS reference: http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0004.pdf (Section **20.6.4.603)**

TMDL parameter exceeded: Temperature

Current exceedance: 33% of readings exceeded 20°C standard

Unsupported use: high-quality coldwater aquatic life

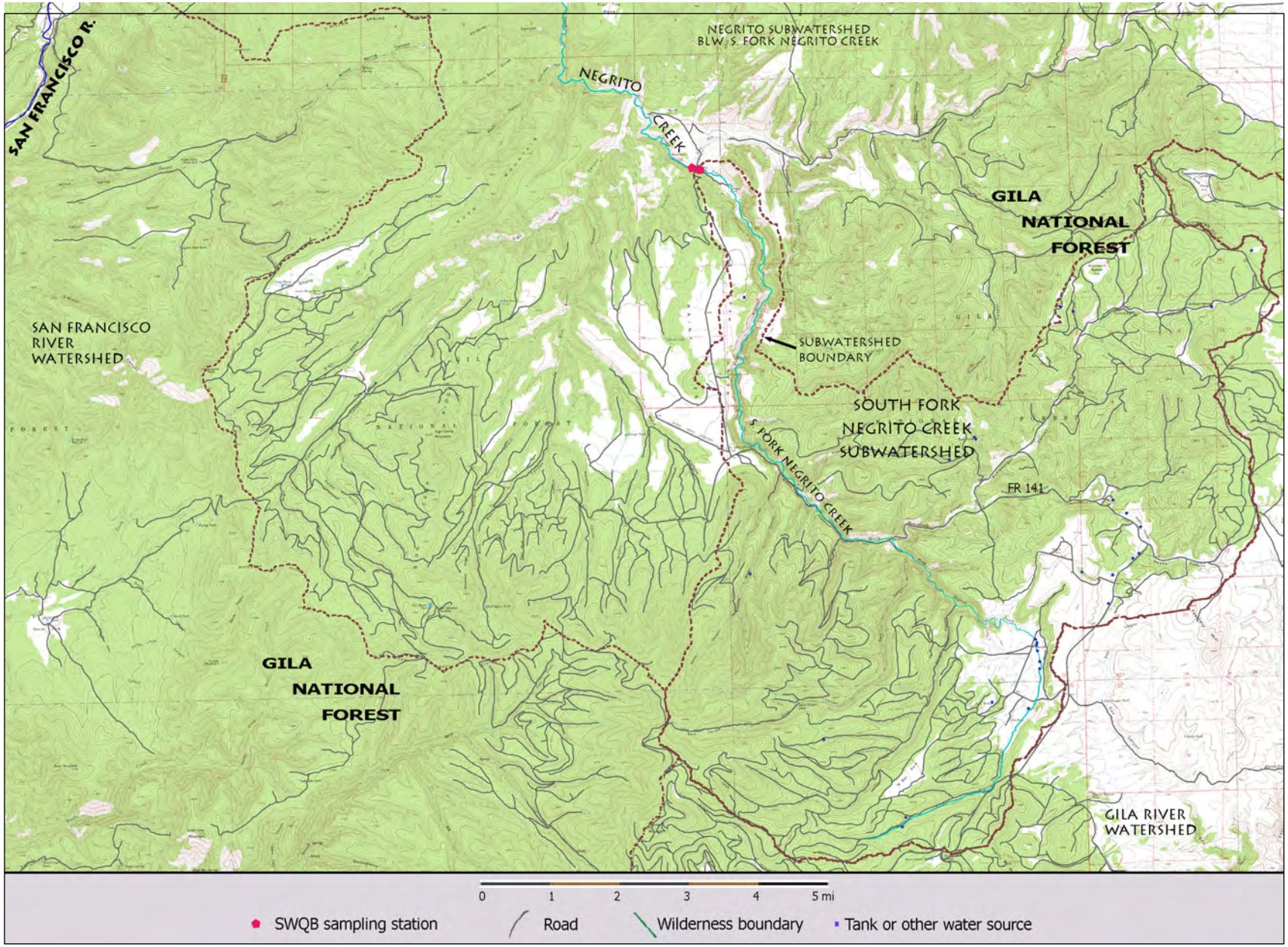
Possible mechanisms	Action (identification of MPs)	Possible MPs
Streambank destabilization and channel widening: increased width-depth ratios Loss/inhibited regeneration of streambank vegetation (shade cover; streambank effects) Roads: sediment runoff effects Reduced base flow due to increased floodplain evaporation/infiltration rates Historic fire suppression and drought effects: increased tree densities, reduced herbaceous cover, increased sediment runoff to channel	Evaluate stream bank condition; vegetative cover Evaluate stream channel morphology Evaluate trail and road impacts, including stream crossings (GNF & partners travel management planning underway) Evaluate upland herbaceous cover and forest densities for thinning projects (Negrito Creek ecosystem project underway)	Streambank filter strips or near-channel pole/post/herbaceous plantings (with protective fencing In-channel structures to decrease width-depth ratio Road closures; road or culvert improvements Prescribed burning/thinning to improve native ground cover (some projects completed)

SOUTH FORK NEGRITO CREEK SUBWATERSHED—continued

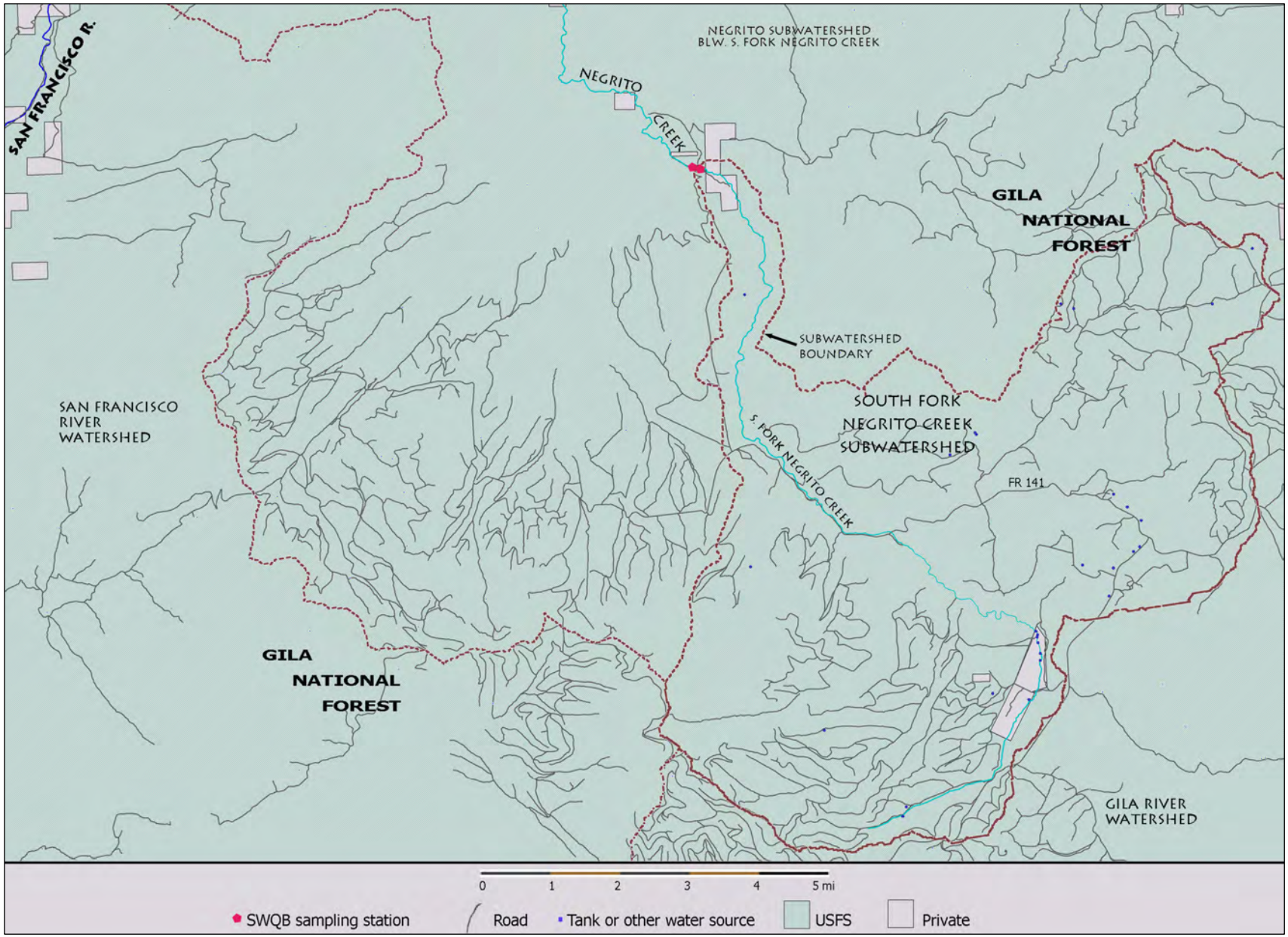
Milestones	Schedule	Target criteria
Potential streambank planting sites identified and workplan developed in conjunction with GNF, other partners	Dependent on GNF scheduling	Riparian canopy cover increased 25 to 50% through selected reach
Ditto: in-channel structures		Reduction in width-depth ratio of 20%
Roads identified for closure/improvement	Dependent on GNF scheduling 2008?	Percent reduction in sediment inputs from roads to be based on planning results See scoping details per GNF
Negrito thinning project complete (per goals outlined by GNF and partners)	2007-2008	2012 target: Temperature exceedances reduced to <15%

Monitoring (suggested monitoring protocols are described in Section 6):

- Regular NMED/SWQB monitoring and sampling at established stations
- Photo points
- Monitor riparian tree canopy at selected locations
- Establish and monitor channel morphology cross-sections at selected intervals
- GNF monitoring plan developed in conjunction with the Negrito Ecosystem project for thinning work



Map TMDL-31. Topographic map, South Fork Negrito Creek subwatershed. Base image from USGS 1: 24000 quads. All data from USGS, NMED, and USFS Gila National Forest.



Map TMDL-32. Land management status map, South Fork Negrito Creek subwatershed. All data from NMED, USGS and USFS Gila National Forest.

Map TMDL-33. Aerial photography relief map, South Fork Negrito Creek subwatershed. Base image: 1996–2002 USGS digital orthophotoquads. All data from NMED, USGS, and USFS Gila National Forest.

SOUTH FORK NEGRITO CREEK—continued

South Fork Negrito Creek photos, clockwise from upper left: At FR 141, May 2001; at USFS campground, May 2001; mesa off FR 141, May 2001; USFS grade control at road intersection, May 2001; at NMED sampling station, April 2001. All photos courtesy NMED, Silver City.