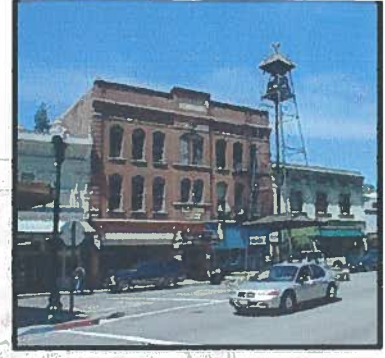


WHEREAS, according to the Consumes, American, Bear and Yuba Planning Committee (CABY), which is comprised of a broad representation of various interest groups such as water agencies, conservation groups, counties, regional and agriculture groups, watershed collaboratives, tribe and recreational groups, and the South Fork American River Watershed Plan dated February 2009, states as their main objective a collaborative effort to reduce mercury contamination, and protect and restore the local streams and rivers; and



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Prepared for:
South Fork American River Watershed Group

Prepared by:
El Dorado Irrigation District
with EN2 Resources



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This goal addresses several issues across the SFAR watershed including sedimentation, contamination, fire and fuels, water supply, temperature, flooding, groundwater, habitat alteration, and fisheries and aquatic biota. This goal seeks to protect and improve watershed resources such as water supplies, stream flow, water quality, habitat, and fish and wildlife through the development and application of good land use practices for the variety of land uses occurring in the SFAR watershed. Improved land use practices, as reflected in the SNFPA 2004 (see Chapter 3, mandatory plan #5), can help maintain healthy forests; healthy riparian systems (that provide stream shading to help control stream temperatures and provide adequate herbaceous undergrowth to buffer streams from contamination runoff); and well-vegetated slopes that reduce sediment and erosion runoff and increase infiltration rates into aquifers. Sound land use and design development that minimizes habitat degradation can also protect fisheries and other aquatic biota and protect habitat for sensitive or threatened and endangered species.

Goal 8: Manage sediment for water resources, infrastructure and habitat value.

Sediment can be a challenge to manage, as there are habitat and infrastructure issues associated with too much as well as too little. Excessive sedimentation is a consequence of stream bank or upland erosion overloading a stream's capacity to transport and distribute the material. Excessive sedimentation causes channels to aggrade, becoming more shallow and unable to accommodate high flows, which results in flooding and damage to infrastructure. It can also contribute so much fine material to a stream that fish spawning areas and aquatic biota are buried. On the other hand, streams in balance with natural sediment loads are important and necessary for aquatic biota. Trout and salmon must have clean, renewable gravel as well as some fine material for successful spawning; invertebrate populations require cobble-sized material; and stream banks are continuously rebuilt from material deposited during high flow events.

Goal 9: Reduce mercury contamination in waterways.

Mercury contamination resulting from historic mining activity is a serious problem in certain segments of the SFAR Watershed. Mercury (Hg), when methylated, becomes toxic to living forms. Hg deposited and isolated in specific stream locales and in reservoirs can be removed. However, the best management practice is to reduce the input of mercury by addressing the sources such as leaching or runoff from old mines.

Goal 10: Reduce contamination of surface and groundwater resources.

Evidence indicates that certain surface and groundwater sources in the watershed have become contaminated, including, but not limited to, the listing of the lower section of the SFAR on the EPA's 303(d) list. Reducing contaminants throughout the watershed will depend upon improved groundwater protection, through measures such as better waste and stormwater management, land use

recreational vehicles and re-vegetating exposed soils can reduce sediment inputs. Additionally, mass wasting events in the past have been triggered by extreme wildfire events in the SFAR watershed. It is of utmost importance to target areas of high wildfire risk for fuels management and, if needed, immediate re-forestation.

Objective 3: Meet and/or attain Regional Water Quality Control Board standards.

Sediment, temperature, and contaminants are the principal water quality concerns in the SFAR Watershed. Each of these water quality parameters must meet State and federal standards for the designated beneficial uses set out in the regional water quality Basin Plans. Improving and maintaining water quality requires intercepting and buffering inputs through best management practices that sustain healthy riparian and upland systems, preserve water quality for human consumption and crop application, and effectively manage wastewater sources and other sources of contaminants.

Objective 4: Work collaboratively to restore state designated impaired water bodies (303(d)).

At present, the only 303(d) listed water body in the SFAR watershed is the lower portion of the SFAR, from Slab Creek Reservoir to Folsom. It is listed for mercury. Because of the ubiquitous nature of mercury contamination throughout the regional planning area (CABY), cooperation between county agencies and water districts is necessary to address this water quality issue; this is a key concept not only for restoring the quality of the lower SFAR, but for preserving water quality throughout the SFAR watershed.

Objective 5: Support forest management practices and mining management that benefits watershed resources.

The SFAR Watershed includes a high proportion of forested land, making forest management a critical component of water resource planning (e.g., ENF and large amounts of forest lands in private ownership). If the hydrologic climate in California continues to shift as predicted towards warmer temperatures, longer and drier summer seasons, and flashier hydrographs in the wet season, it will become even more critical to manage forest densities and fuel loadings. Forest management is essential to offset the effects of increased drought, pests, diseases, and fires to conifer forests in our region, all of which have an effect on water quality and supply. It is the intention of the SFAR Watershed Group to encourage and support a full range of forest management projects that employ best management practices to manage forest densities, reduce fuel loadings, and control wildfires. At the same time, stakeholders wish to improve watershed conditions associated with grazing, mining, and recreation management and to reduce sediment inputs through road and trail improvements.

Objective 6: Protect, restore, and enhance beneficial sediment transport processes.