



Watershed Goals and Recommendations

*Drawn from the *Alhambra Creek Watershed Management Plan*, April 2001

WATERSHED GOALS*	Benefits provided by Watershed Goals	Recommended action to achieve Goals*	Obstacles to implementing Goals
Reduce flood damage and conserve stormwater	Flood protection	<ul style="list-style-type: none"> • Promote a watershed approach for analyzing flooding and water conservation issues. • Reduce rate and volume of runoff. • Reestablish floodplains and restore proper functioning condition to creeks. • Encourage land uses that do not increase the amount of impervious surfaces. • Improve interactions with public agencies to address local flooding issues. 	<ul style="list-style-type: none"> • Lack of understanding of how runoff functions in the hydrological cycle. • Development, esp. paved (impervious) surfaces, and building in flood plain make flooding worse. • Traditional flood control practices and structures (culverts; straight, narrow concrete channels) may exacerbate flooding downstream of the structures.
Prevent excessive erosion and conserve soil resources	Fertile and abundant soil resources	<ul style="list-style-type: none"> • Identify and assess areas of excessive erosion and sources of sediment. Determine baseline rate. • Encourage the use of Best Management Practices (BMPs) to remedy erosion and sediment problems from identified sources. • Promote and implement erosion and sediment reduction methods and projects. Use these projects to provide information to the public about erosion and sediment reduction. • Minimize erosion and sediment load from construction activities. • Minimize soil loss from orchards, vineyards, and ranches. • Minimize erosion and property loss from creekside residences. • Reduce erosion of creek banks in the watershed. • Use a systems approach to restoration, using techniques based on hydrogeomorphology and adaptive management. • Reduce shoreline erosion along the Martinez shoreline. 	<ul style="list-style-type: none"> • Lack of understanding of natural soil processes and how to augment natural features of watershed to conserve soil. • Exposed soil on slopes, and in urban and construction areas, suffer from high levels of erosion. • Poorly designed fire roads contribute greatly to erosion. • Mismanaged grazing areas lead to loss of vegetation and erosion. • Widespread, invasive exotic vegetation does not bind soil as well as displaced native plants, allowing greater levels of erosion to occur. • Creek banks altered for flood control purposes disrupt natural flows, causing bank failure and erosion. • Paved surfaces cause greater and more rapid runoff during storms, causing higher levels of erosion.

WATERSHED GOALS*	Benefits provided by Watershed Goals	Recommended action to achieve Goals*	Obstacles to implementing Goals
Reduce wildland fire damage	Healthy and abundant plant resources	<ul style="list-style-type: none"> • Support use of sustainable management practices for fire fuel load management. • Coordinate with the efforts of the Fire Safe council to help landowners create a defensible space around their homes and reduce the fire fuel load on their properties. • Support implementation of a coordinated fire management plan for the watershed in cooperation with public agencies that respect agency mandates. • Work with the landscape industry to promote the design, installation, and maintenance of landscapes that align with fire safe principles. 	<ul style="list-style-type: none"> • Houses and other infrastructure in fire-vulnerable areas make the use of fire management techniques such as controlled burns and grazing more difficult. • Lack of information and other assistance for landowners who wish to implement sustainable management practices and fire-safe landscaping. • Exotic annual grasses now covering large areas make the landscape vulnerable to burning over a longer period of time during the year than the original perennial bunchgrasses. • Fire suppression allows large buildups of fuel, causing hot, destructive fires to occur rather than smaller, benign periodic fires that reduce fuel buildup and encourage plant growth.
Protect and improve water quality	Clean and abundant water supply	<ul style="list-style-type: none"> • Reduce non-point source pollution. • Reduce illegal dumping. • Promote the appropriate use of the National Pollutant Discharge Elimination System program for rural areas. • Protect water quality and quantity during agricultural activities. • Reduce stormwater pollution from construction-related activities. • Work with the Agricultural Dept. to provide information to fruit tree owners about potential biological threats and healthy ways to combat them. • Support water quality testing, monitoring, assessment and other research. 	<ul style="list-style-type: none"> • Inadequate understanding of importance of overall ecological health of the watershed in maintaining clean and abundant water supplies. • Sediment from excessive erosion in creek channels or uplands. • Pollution hazards from point sources: illegal dumping of oil, antifreeze, paint, solvents; draining of gray water, pool water, vehicle-washing facilities, etc., into streams or sewer drains. • Pollution from other non-point sources in watershed: commercial waste, livestock and pet waste, residential & landscaping runoff (including pesticides, chemicals, fertilizers), automobiles, streets & parking lots. • Pollution from accidents: transport of hazardous materials on railroads and highway, sewage pipes. • Possible heavy metal contamination (legacy pollutants).

WATERSHED GOALS*	Benefits provided by Watershed Goals	Recommended action to achieve Goals*	Obstacles to implementing Goals
Encourage coordination of city and county general and specific plans, using the watershed as a planning unit.	Provides a sensible and effective planning area for issues related to streamflow.	<ul style="list-style-type: none"> • Develop the watershed planning group and the watershed plan as resources that can be used to coordinate watershed planning and management with city, county and other agencies. • Support improvement of the permitting process to help ensure that watershed health issues are comprehensively met. • Support the continuation of the Stream Assessment Project to identify indicators for monitoring of watershed health. • Promote the adoption of reaches of creeks by neighborhoods/businesses on them to enhance stream and riparian habitat and monitor their health. 	<ul style="list-style-type: none"> • Some flooding, bank erosion, and water quality problems within the City of Martinez are aggravated by conditions in the upper watershed, such as illegal dumping. • Lack of understanding of the watershed concept and the benefits of using the watershed as a planning unit when addressing flooding and water quality issues.
Support economically and environmentally sustainable land uses, while protecting private property rights.	Natural resources of watershed are an economic asset.	<ul style="list-style-type: none"> • Share information with the public about rural land uses and their role in watershed community. • Support innovations to enhance and maintain the economic and environmental viability of agriculture. • Encourage diversification of downtown economy, and its connection with the natural environment. • Encourage ranchers to apply sustainable range management practices using a watershed approach. • Work with the Agricultural Dept. to provide information to fruit tree owners about potential biological threats and healthy ways to combat them. • Support management and restoration of stream and riparian areas for long-term environmental sustainability. • Encourage the design, installation and maintenance of economically and environmentally sustainable landscaping. • Promote the use of mulching and composting of organic waste. 	<ul style="list-style-type: none"> • Inadequate understanding of how environmental sustainability is essential for economic sustainability. • Lack of information and other assistance for landowners who wish to implement or improve the sustainability of their land use practices.

WATERSHED GOALS*	Benefits provided by Watershed Goals	Recommended action to achieve Goals*	Obstacles to implementing Goals
Promote a sense of watershed community.	Source of community pride and focus of neighborhood involvement and activities.	<ul style="list-style-type: none"> • Facilitate and coordinate communication among members and groups of the watershed community. • Increase community awareness and understanding of the watershed's physical and natural features, processes, people, and economy. • Educate the public about the Alhambra Watershed Action Group and the Alhambra Creek Watershed Plan. • Promote and encourage research and management projects in the watershed. • Protect and restore natural streams and riparian buffers wherever possible. 	<ul style="list-style-type: none"> • Insufficient understanding of watershed's physical and natural features, processes, people, and economy. • Degraded and polluted natural areas, especially creek areas. • Lack of awareness of current efforts (AWAG and other groups; research and management projects) to assess and improve health of watershed. • Inadequate stakeholder participation in planning process.
Maintain and restore fish and wildlife habitat and native plant communities, consistent with environmentally and economically sustainable land use.	Wildlife habitat	<ul style="list-style-type: none"> • Work with willing landowners and managers to maintain and restore native plant communities and natural habitats. • Maintain and restore native fish and wildlife populations. • Preserve and protect endangered, threatened and diminishing species. • Reduce and control harmful exotic species. • Work with willing landowners to encourage research and development and application of wildlife and native plant friendly farming and ranching practices. 	<ul style="list-style-type: none"> • Lack of understanding of importance of wildlife habitat to quality of life in watershed for all occupants. • Lack of information and other assistance for landowners who choose to restore wildlife habitat. • Introduction of non-native plant species has extensively altered habitat, rendering habitat poor or uninhabitable for some wild animal species. • Reduction and degradation of habitat due to development. Continued urban encroachment into natural areas has further reduced and fragmented wildlife habitat.
Maintain and enhance the quality of life by providing increased opportunities to appreciate and enjoy watershed resources.	Provision of high quality of life, and educational and recreational opportunities.	<ul style="list-style-type: none"> • Enhance recreational opportunities for watershed residents to meet future anticipated expanding needs. • Help enhance awareness of the connection between the watershed and the people in it. • Elevate awareness of dumping and its negative consequences in the watershed, especially in the creeks. • Work with the city and county to strike an appropriate balance between development and open space preservation. • Maintain and preserve our ranching heritage. • Work with existing organizations and agencies to find ways to voluntarily preserve open space. • Reduce harmful air emissions where practical. 	<ul style="list-style-type: none"> • Lack of awareness of how individual actions impact health of watershed. • Educational programs/materials focusing on the watershed not sufficiently developed and/or widely used. • Access to natural areas could be improved.

