Section

6

Water Management

Water Management

GOAL WM-1
Promote efforts that protect and increase water supply storage and capacity.

GOAL WM-2
Strike a balance between water supply infrastructure and new development.

GOAL WM-3
Promote reclamation and conservation of water.

GOAL WM-4
Protect water quality by improving storm and wastewater management practices.

This section addresses water supply, distribution and quality. Aspects of water as it relates to infrastructure involves the movement, acquisition, and distribution of water which is a major factor associated with future development in the Ukiah Valley. Water quality is addressed in terms of potential sources of degradation, such as through sedimentation, paved surface runoff, and wastewater discharges. Community sewer services are reviewed in their ability to serve the community with sufficient storage capacity and effective wastewater treatment.

Water related issues are organized into the following categories:

I. Water Supply

II. Water Distribution, and Infrastructure

III. Water Demand

IV. Water Quality

I. Water Supply, Distribution, and Demand

Water Supply
Surface water supplies include the Eel River, from which water is diverted into the Russian River watershed through the Potter Valley Project, Lake Mendocino, and the Russian River. Groundwater is drawn from the Ukiah Valley groundwater basin. The Ukiah Valley groundwater basin is the northernmost basin in the Russian River water system. The groundwater basin was created in a depression formed by faulting and is about twenty-two miles long and an average of three miles in width. It underlies an area of over sixty square miles. The supply of ground and surface water available for use varies with precipitation, intensity of water use, ability for groundwater recharge, and ground permeability. Water enters the groundwater system via percolation of surface waters and through the soil. The creeks and streams in the Ukiah Valley provide drainage channels for groundwater recharge, as well as domestic and agricultural water supply.

Water availability has long been an issue in the Ukiah Valley and is a likely constraint to future development in the Valley, complicated by legal, environmental, political and socioeconomic issues. Challenges include decreased water diversion from the Eel River, as well as difficulties and lengthy time inherent in developing new supplies in the face of increasing demand. Various “unknowns” related to water supply make

planning for future growth and development a difficult task. Unknowns include water purveyors perfecting their surface water rights, the definition of Russian River underflow, versus groundwater, continued refinement of water agreements, and changes in imports from the Eel River through the Potter Valley Project.

WATER DISTRIBUTION AND INFRASTRUCTURE

Community Water Services: There are five major providers of community water services in the Ukiah Valley. The City of Ukiah serves customers within the City, while Rogina Water Company and Millview, Calpella, and Willow County Water Districts serve the unincorporated areas. All suppliers are regulated by the California Department of Health Services, and Rogina Water Company is additionally regulated by the California Public Utilities Commission. These water providers hold varying claims to water rights for current and future use.

The primary water source for water providers in the Valley is the Russian River and diversion of Eel River water with storage in Lake Mendocino. Property owners without access to the City or community systems obtain water from individual wells, springs or direct diversions of Russian River water. Some water needs are also supplied by wells that tap groundwater aquifers that are not connected to the underflow of the Russian River.

Provider Sources and Areas Served

Millview County Water District serves an expansive area extending north of Ukiah to south of Calpella, and west of US 101 into the eastern Valley, including the Redemeyer Road area. The main water source is Russian River underflow and surface stream flows.

Typical water pumping facility

Calpella County Water District serves the Calpella community, from south of Calpella to north of State Route 20, and from U.S. 101 nearly to Lake Mendocino. Since Calpella County Water District obtains much of its source capacity from Millview County Water District, it may be impacted by Millview's negotiations with the Russian River Flood Control and Water Conservation Improvement District.

Willow County Water District serves much of the area south of the City limits extending to the south of the UVAP planning area, generally from the railroad tracks on the east, to large blocks of land south and southwest of the City including the Oak Knoll area and lands along State Route 253.

Rogina Water Company serves development within the franchise area in the eastern Valley granted by the Public Utilities Commission. The service area extends from Rogina Heights on the north to about three miles south of Talmage, including portions of the Mill Creek drainage west to the Russian River and the Vichy Springs, El Dorado, and Rogina Heights subdivisions.

The City of Ukiah serves customers within the City limits and maintains emergency service intertie agreements with Millview and Willow County Water Districts, relying on project water when natural flows are less than its pre-1949 rights.

The Mendocino County Russian River Flood Control and Water Conservation Improvement District has appropriative water rights to 8,000 acre feet of Russian River project water stored in Lake Mendocino. While it is true that the District wholesales municipal water, nearly all if not all of the agricultural water is actually delivered to the end user.

Russian River

Water Rights: There are five different types of rights to water in the Russian River: riparian rights, pre-1914 appropriative rights, pre-1949 appropriative rights, project water, and post-1949 appropriative rights.

- Riparian rights usually apply to lands bordering the Russian River and involve a right of land owners to use the natural flow of the stream directly for beneficial purposes on lands adjacent to the source.
- Pre-1914 appropriative rights were established prior to December 19, 1914 and are the oldest water rights in the watershed. Actually the SWRCB has comparatively little say in how the pre-1914 rights are used - which is why pre-1914 water rights are attractive to some.
- Pre-1949 rights are held by entities that diverted water from the Russian River (or tributaries to the Russian River) before 1949 when the Coyote Dam project was approved. Water available for pre-1949 diversions include natural flows of the Russian River and imported water from the South Fork of the Eel River. Pre-1949 rights are held by municipal, industrial and agricultural interests.
- Project water refers to water resulting from the creation of Lake Mendocino which is formed by the Coyote Dam. Project water is released from storage in Lake Mendocino and reserved for uses in Mendocino County under a Russian River Flood Control and Water Conservation Improvements District's

(RRFCD) water right permit. The permit is limited to 8,000 acre-feet annually as depleted by consumptive use. During dry years when natural flows in the river are limited, some pre-1949 water users may be dependent on use of project water.

- Post-1949 rights are appropriative water rights granted by the State Water Resources Control Board (SWRCB) to a water provider to divert the surface or underflow of the river or one of its tributaries subsequent to the project authorization to construct Coyote Dam in 1949.

Water Demand

Quantifying water demand and identifying all potential water sources will facilitate effectively planning for future development. Demands for short, intermediate and long-term planning periods should be determined in advance of any approvals for new development projects and should be utilized in the decision-making process.

Adopting standards to make approval of development projects contingent upon ability to serve will prevent an over-commitment of water resources. Avoiding the practice of water export will further preserve the community's ability to support and fund Valley-based facilities and services. In instances where water and sewer network expansion is proposed as part of new development outside of existing service areas, making the cost of expansion the responsibility of those proposing the development, will ensure stability for existing customers. Substantial agricultural production in the Valley depends upon large quantities of water for irrigation. Projected growth, including future residential, commercial and industrial development in the Valley will require water usage as well. Promoting reclamation, additional storage and conservation of water will help the Valley meet and sustain long-term needs.

Future water demands are typically estimated by characterizing existing water usage rates and patterns, assessing whether or not these usage rates and patterns will change in the future, and applying the projected usage rates to anticipated population growth rates or land use changes.

The Mendocino County Water Agency prepared the *Water Supply Assessment for the Ukiah Valley Area Plan –October 2010,* which contains an analysis of the water capacity for the entire Ukiah Valley and anticipated water demand for the Ukiah Valley Area (UVA) which constitutes the region covered by the UVAP, excluding the incorporated portions within the City of Ukiah.

According to the *Water Supply Assessment for the Ukiah Valley Area Plan – October 2010,* between 2000 and 2009 total water production in the UVAP planning area – the combined production of Calpella, Millview, Ukiah, Rogina, and Willow – ranged from 5,451 acre-feet in 2009 to 7,679 acre-feet in 2002, and averaged 7,098 acre-feet. In each year Ukiah accounted for roughly 50 percent of the total water produced, while Millview and Willow accounted for approximately 25 and 15 percent of total water production, respectively. Under existing conditions approximately 75 percent of the water produced by the five public water service providers – Calpella, Millview, Ukiah, Rogina and Willow - is used for residential purposes, while commercial uses account for approximately 15 percent of the total production, and the balance - approximately 10 percent – is used for industrial and miscellaneous purposes.

As explained in the Water Supply Assessment for the Ukiah Valley Area Plan – October 2010, future water demands are typically estimated using one or a combination of three predictive

methodologies; ***population based, connection based, or land use based.***

Land use based water demand projections are typically calculated in a three-step process that begins with the characterization of land use types within a given geographic area, followed by the assignment of "unit water demand rates" for each land use type. Water demands are subsequently computed by multiplying the acreage associated with each land use type by the associated unit water demand rate, and summing the resulting water demands for each land use type to obtain a total water demand figure for the geographic area in question. For the purposes of this analysis, future land uses within the UVAP planning area were characterized and grouped into four categories; single family, multifamily, commercial, and industrial. Land use based water demand projections for the UVAP planning area indicate water demands will increase by 4,722 acre-feet by 2025 for a total water demand of 12,371 acre-feet (revised number per final UVAP Water Supply Assessment).

Future water demands for the UVAP, based on the land use predictive methodology and the UVAP land use based usage rates, are detailed in the *Water Supply Assessment for the Ukiah Valley Area Plan – October 2010.*

Water Conservation Requirements

Mendocino County should adopt progressive construction strategies and technology to minimize impacts to the local infrastructure and environment. All new building and redevelopment in the Valley should rely on mandatory water conservation programs using reduced-flow water fixtures and irrigation equipment, native and drought tolerant landscaping, and other passive and active systems to reduce water demand and free up capacity for new uses. Conservation strategies such as reclaiming storm water and reusing wastewater will also help to maximize water supply and reduce demand. Water conservation, water recycling programs and Valley-wide coordination can augment the available water supply. When development is proposed, proof of water availability would need to be demonstrated.

Senate Bill x7-7 (SBx77) became law in 2009 and requires the State's retail urban water purveyors to reduce urban per capita water usage by 10 percent on or before December 31, 2015; and by 20 percent by December 31, 2020. Pursuant to SBx77, retail urban water purveyors are defined as a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or supplies more than 3,000 acre-feet of potable water annually for municipal purposes. Currently, only Ukiah meets the State's criteria for retail urban water purveyors. However, it is anticipated that by 2030, Millview, the second largest retail urban water purveyor in the UVA, will also meet the State's criteria and be subject to SBx77. Although current law excludes Willow, Rogina and Calpella from the requirements of SBx77, it is anticipated that at some point in the future the law will be amended to include all retail urban water purveyors, regardless of size.

Although relatively straight forward in theory, the process by which retail urban water purveyors will demonstrate compliance with SBx77 has not been fully vetted. Key issues include the establishment of baseline per capita usage rates from which

a 20 percent reduction in per capita usage will be measured and appropriate exemptions for those entities that have already achieved significant reductions prior to SBx77. Consequently, the likelihood of all retail urban water purveyors actually achieving the water conservation savings mandated by SBx77 remains unclear. Implementation of the water conservation mandates imposed by SBx7-7, by all retail urban water purveyors in the UVAP planning area, would substantially reduce the amount of "new water" needed for UVAP implementation – water conserved by existing users would provide in part, the water needed for UVAP implementation. For example, in the case of the UVAP, the incremental increase in water demands – i.e., the need for new water supplies – would be reduced by approximately 55 percent, from 6,095 acre-feet to 3,346 acre-feet in 2030. (Source - Final Water Supply Assessment for the Ukiah Valley Area Plan –October 2010). Though SBx77 establishes water conservation goals, we cannot however count on these reductions being achieved and therefore, still need to proceed with the assumption that the estimates of "new water" needed to support the growth established by the UVAP are not based on anticipated reductions through conservation.

Agency Involvement: Many agencies regulate the use of water in the Ukiah Valley and the Russian River. Use of water in the river, which includes underflow, is regulated by the State Water Resources Control Board (SWRCB). The Russian River Flood Control and Water Conservation Improvement District (RRFC&WCID) manages flood control and has water rights to 8,000 acre feet per year of water stored in Lake Mendocino and released to the Russian River in the summer months.

District and agency water providers in the UVAP planning area obtain rights to Russian River water via permits and licenses from the State Water Resources Control Board (SWRCB). These permits and licenses regulate where, when and how much water can be diverted, and specifically where the water can be used. While permits are issued for specific periods of time, licenses apply to the amount of water put to beneficial use. These permits and licenses do not guarantee that water will be available for diversion. In dry years, water may not be available to meet all rights. Appropriative rights have a certain priority based on when they were filed. The right to use the available supply of water is based on the priority of the right. The SWRCB has declared that the Russian River is fully appropriated during the season from July 1 to October 31.

Water Quality

Water quality is regulated by the North Coast Regional Water Quality Control Board (NCRWQCB) and indirectly by the County Division of Environmental Health. Wildlife resources are regulated by the Department of Fish and Game (DFG), U.S. Fish and Wildlife Service and National Marine Fisheries Service.

A number of collaborations could be instrumental in maintaining a healthy water supply for the Valley. Cooperating with the City of Ukiah, LAFCO, the County Water Agency and local water districts will achieve the most comprehensive approach to strategically conserving and allocating water resources. Collaborative outcomes could include: water source identification, increased water appropriations, expanded storage capacity, infrastructure provision and mandatory municipal service evaluations. Additional water supplies should be pursued by identifying Russian River system water rights that may be available to support development of new land uses in the Valley; exploring water storage capacity expansion in Lake Mendocino, Lake Pillsbury, off-stream reservoirs, the Russian River and its tributaries; providing technical and political support to water districts and

agencies in their negotiations with Sonoma County Water Agency, and by coordinating with water purveyors to participate in hearings and actions involving water rights and distribution of area water.

Surface and ground water systems are typically interconnected. Water quality degradation of one system has the potential to contaminate the other. The types of water quality degradation of most concern in the Ukiah Valley are sedimentation, surface runoff, and wastewater discharges. For more on water quality and resource management practices pertaining to biological systems please see Section 9, Open Space and Conservation.
Water quality issues are governed by the Federal Clean Water Act enforced primarily by the United States Environmental Protection Agency (EPA). The State Porter Cologne Act is enforced by the North Coast Water Quality Control Board and to a lesser degree the County Environmental Health Department. All public and private development in the Ukiah Valley must comply with these laws to protect water sources including the Russian River, its tributaries, and the groundwater system and their distribution, storage and use.

Surface Water Runoff: The potential for surface water contamination increases with greater paved areas or impermeable surfacing, and with greater numbers of vehicles, maintenance facilities and businesses. Even with normal use, vehicles in parking lots may leak oil, fuel or coolant. Public and private vehicle and equipment storage, repair, maintenance and service facilities and businesses may also concentrate pollutants. Runoff from residential development also contributes to water pollution. Potential sources include vehicle maintenance wastes, pesticides, household hazardous wastes, pet wastes, and trash. During storms, contaminants may be discharged from parking lots, repair, service, and maintenance facilities, and other areas into stormwater systems and ultimately into the Russian River. When surface water and stormwater runoff is controlled, the volume of contamination entering the Russian River system is reduced.

Urban runoff is a leading cause of pollution throughout California. Pollutants present in storm water can have damaging effects on both human health and aquatic ecosystems. In addition, the increased flows and volumes of storm water discharged from impervious surfaces resulting from development can significantly impact beneficial uses of aquatic ecosystems due to physical modifications of watercourses, such as bank erosion and widening of channels. The National Pollutant Discharge Elimination System (NPDES) under authority of the Clean Water Act (CWA) was established in order to help address urban runoff pollution. These regulations require the State Water Resources Control Board (SWRCB) to issue NPDES storm water permits to operators of small municipal separate storm sewer systems (Small MS4s) that discharge to waters of the U.S. Portions of the UVAP planning are subject to the NPDES permit requirements. Criteria for inclusion in the NPDES program are established by the SWRCB.

In order to reduce the volume of contamination entering the Russian River system and control surface water runoff, a range of strategies is needed. Developing and implementing Best Management Practices Guidelines will help to protect Ukiah Valley's waterways from pollution and sedimentation of storm drain system and creeks. Guidelines should require: alternatives to impervious surfaces in new development, redevelopment or public improvement projects; site design that utilizes natural topography and limits grading to the extent practical; and native landscaping to absorb and filter fertilizers, pesticides and other pollutants. Storm

water drainage facilities should be designed in accordance with storm water mitigation standards and guidelines outlined in the Standard Urban Storm Water Mitigation Plan (SUSWMP) and the Mendocino County Road and Development Standards. Specifically, storm drain design in the Ukiah Valley Plan area should rely on rainfall duration and intensity relevant to the Valley, as presented in the Mendocino County Road and Development Standards document.

Development Impacts: Development patterns within the Valley, particularly within the City of Ukiah, have resulted in increased paved or impermeable surfaces and the conversion of streams and creeks to channelized drainage facilities. Channelization of waterways and the creation of impermeable surfaces disrupt natural drainage patterns, which can result in increased flooding and deterioration or destruction of natural riparian habitats, fisheries, and reduced local groundwater recharge. There is a need to provide mitigation that will balance development with the resources and critical functions that the Russian River and its tributaries provide.

Sedimentation: Sediment and debris caused by hillside erosion and ground disturbance can migrate into watercourses and degrade water quality, affecting fisheries and recreational use and reducing flood carrying capabilities. Unpaved roads are typically the largest contributor to sedimentation of water courses. These materials clog and reduce drainage system capacity and indirectly affect water quality. This may result in flooding of tributaries or overflow at culverts and storm sewers. In 1998, pursuant to the Clean Water Act, the State Water Resources Control Board listed the Russian River as an “impaired water body” due to excessive sediment, thereby requiring the adoption of “total maximum daily load” standards to control the discharge of sediments. Future amendments to the North Coast Region Basin Plan may include prohibitions or limitations on sediment discharges and best management practices for erosion control, unstable areas, and riparian zone management.

Wastewater Contamination: Major sources of concern for water contamination revolve around septic system location and function, sewage treatment facility capacity and disposal methods, as well as landfill drainage. Wastewater discharge from individual sewage treatment facilities can be a significant source of contamination if systems are not designed properly. In general, steep or impermeable areas are not conducive to septic system use. Older septic systems without adequate leach field replacement areas, or a high density of septic systems within an area can also pollute groundwater resources.

Water quality can be protected by providing adequate sewage disposal in urban and rural areas. Compliance with current septic system regulations decreases the potential for future

problems, but ultimate conversion to public sewer systems is a more long-term solution for higher density areas with older private systems. Supporting increased sewage treatment facility capacity will more responsibly serve current and future needs of the Ukiah Valley.

The City of Ukiah's Municipal Landfill located on Vichy Springs Road, east of the Russian River, has historically been part of the overall waste management system for Mendocino County.

This landfill is currently closed. Landfills must be designed to contain any water that touches the fill area. Monitoring and remediation of any identified problems must continue during the life of the landfill, and for at least 30 years after its closure. Surface water is contained through collection ponds designed to trap any excess flow of water so that it cannot leave the landfill site.

The sewage treatment plant owned and managed by the City of Ukiah serves the City as well as areas throughout the Valley via the Ukiah Valley Sanitation District. Prior to the establishment of stricter regulations, treated and untreated water from municipal sewage disposal systems was discharged into water systems. Today, sewage disposal methods continue to improve. Urban sewer plants were among the earliest targets for clean water actions and improvements.

Community Sewer Services: The Ukiah Valley Sanitation District (UVSD), the City of Ukiah, and Calpella County Water District provide public sewer services to customers within their boundaries under the purview of the State Water Quality Control Board. These agencies ensure that wastewater is collected, treated and disposed of safely and efficiently.

The City of Ukiah Wastewater Treatment Facility: The Russian River is a critical component of the City's wastewater treatment system which also serves sewered portions of the Ukiah Valley via the Ukiah Valley Sanitation District. The City of Ukiah owns and operates a wastewater treatment facility that provides service to about 17,000 people in the City and the Ukiah Valley Sanitation District (UVSD). The facility is located just south of the Airport Industrial Park, east of Highway 101, and west of the Russian River. During wet months, treated water may be released into the river, so wet season storage capacity is adequate. During dry months however, treated water is maintained in ponds, requiring additional storage capacity. With demand nearing facility capacity, the City has undertaken a plant expansion including improved liquid treatment and solids treatment, advanced waste processes, increased plant reliability, and restored and increased plant capacity to accommodate planned growth within the City and the UVSD. In order to repay the bonds for the capacity addition to the wastewater treatment plant improvement project, the Ukiah Valley Sanitation District (UVSD) and the City impose fees for connecting to the wastewater system. Monthly sewer fees are used for the rehabilitation component of the facility improvement project.

The Ukiah Valley Sanitation District: In 2008, the Ukiah Valley Sanitation District (UVSD) transitioned to a five member elected board. Prior to that, the district was represented by a three member board of directors chosen from the City Council and Board of Supervisors. The UVSD is responsible for maintaining its portion of the network of collection pipes leading to the City of Ukiah's sewage treatment facility. The district currently encompasses lands north and south of Ukiah, extending south of State Route 253, and to north of The Forks, Mendocino College,

and El Dorado, Vichy Springs and Guideville Rancheria in the eastern valley. Limited areas in the City are also served. The UVSD's Master Service Plan (filed with the Mendocino County Local Agency Formation Commission) identifies future service and annexation areas, based largely on technical service feasibility. To avoid service gaps, a proposed northern boundary would extend to the southern boundary of the Calpella County Water District. While sewers may be extended to protect or remedy water quality, decisions about land use density should continue to be governed by the General Plan and UVAP, rather than being driven by the availability of sewer and water services, so as to allow for managed growth that upholds all of the communities planning principles.

Calpella County Water District: The Calpella County Water District (CCWD) serves the Calpella community and surrounding areas, providing service to an estimated population of 500 with 103 sewer connections. The CCWD's wastewater treatment plant, located at the south end of Calpella, has a capacity of 120,000 gallons per day. The District has received approval from the State Water Resources Control Board to expand its wastewater plant and percolation ponds, located at the south end of Calpella, to serve projected demand as needed.

Septic Systems: Homes and businesses located outside of sewered areas generally use individual on-site septic systems. Although the technology of on-site systems has improved in recent years, Mendocino County's Environmental Health Division has determined that, based upon field investigations, many older systems are leaking into the groundwater system and negatively impacting water quality.

Note:

For additional policies that may apply, please see the County of Mendocino General Plan, adopted August 2009.

GOAL WM1

Promote efforts that protect and increase water supply storage and capacity.

Policy WM1.1: Maintain and increase water supplies and systems for existing and future water system needs.

WM1.1a Identify Water Sources

Cooperate and coordinate with the City of Ukiah, LAFCO, the Water Agency, and local water districts in the provision of infrastructure and services within the Ukiah Valley.

WM1.1b Water Storage Capacity

Expand water storage capacity in Lake Mendocino, Lake Pillsbury, off-stream reservoirs and the Russian River and its tributaries where feasible.

WM1.1c Water Rights Expansion

Identify Russian River system water rights that may be available to support development of new land uses in the Valley.

WM1.1d Enhanced Water Supply

Provide technical and political support to water districts and agencies in their negotiations with Sonoma County Water Agency for additional water supplies to serve Ukiah Valley.

WM1.1e Water Export

Avoid the transfer of ground and surface water resources, rights and supplies originating, used or appropriated for use in the Ukiah Valley to other areas, unless supported by the Mendocino County Water Agency, Russian River Flood Control and Water Conservation Improvement District and Inland Water and Power Commission.

WM1.1f Agricultural Water Supply

Oppose development projects that would reduce water supply or unnecessarily increase the cost of water for agriculture.

Policy WM1.2: Protect and enhance quality of the Valley's groundwater system and long-term sustained yield.

WM1.2a Groundwater Stewardship Program

Assemble baseline information describing existing conditions of the Valley's groundwater system (quality, quantity, demand and re-supply), and develop a comprehensive groundwater protection program with specific protection and mitigation measures.

WM1.2b Development Proposals

Evaluate development proposals using the groundwater protection program to determine potential impacts to aquifers (including ground water recharge and water quality) and possible mitigation measures.

GOAL WM2

Strike a balance between water supply infrastructure and new development.

Policy WM2.1: Strive for efficient delivery of public water services.

WM2.1a Service Evaluation

Involve water agencies, City and agricultural water users in collaboration with LAFCO to perform mandated municipal service reviews.

WM 2.1b Water Rights and Distribution

Coordinate with water purveyors to actively participate in hearings and actions involving water rights and distribution of area water in order to ensure efficient and equitable use of available water rights and supplies.

WM2.1c Quantify Water Demand

Before approving new development projects, work with the City and appropriate agencies to determine community water needs and demand for the short, intermediate and long term planning periods.

WM2.1d Additional Impact Analyses

Require additional analyses to more precisely determine impacts and mitigations where development proposals are determined to have a significant impact.

WM 2.2 Require proof of water before approving development projects.

WM2.2a Proof of Water Standards

Development proposals shall provide adequate proof of water to the Department of Planning and Building Services and the

Division of Environmental Health that adequate water supplies are available to support the new use/development based on the adopted standards.

GOAL WM3

Promote reclamation and conservation of water.

Policy WM3.1: Integrate urban water conservation Best Management Practices into community planning.

WM3.1a Water Conservation Techniques

Require water conservation practices, such as the installation of low-flush toilets and planting of drought tolerant landscaping, in new construction. Utilize these techniques in all new publically-funded construction and development of public facilities.

Require, to the maximum extent practical, the installation of efficient indoor plumbing fixtures, drought tolerant landscaping, and other best management practices identified by the California Urban Water Conservation Council for all new building and redevelopment in the Valley.

Work with the Ukiah Valley Sanitation District to implement a reclaimed water distribution system for use as agricultural irrigation and frost protection as well as urban irrigation.

WM3.1b Landscape Planting Guidelines

Adopt and enforce landscape design guidelines that include palette of appropriate native and water-conserving trees and plants for use in the Valley.

GOAL WM4

Protect water quality by improving storm and wastewater management practices.

Policy WM4.1: Integrate storm water management practices that utilize and mimic natural hydrology into all aspects of development and community design, including streets and parking, homes and buildings, parks and public landscaping.

WM4.1a Standard Urban Stormwater Mitigation Plan

To the extent practical, design storm water drainage facilities within the Valley in accordance with the Guidelines for the Standard Urban Storm Water Mitigation Plan (SUSWIP guidelines) and the Mendocino County Road and Development Standards.

WM4.1b Storm Drainage Design

Use the rainfall duration/intensity data presented in the Mendocino County Road and Development Standards document in conjunction with the design criteria presented in the SUSWMP to design storm drainage facilities in the UVAP area.

WM4.1c Best Management Practices

Address non-point source pollution and protect receiving waters from pollutants discharged to the storm drain system by requiring Best Management Practices.

Develop, adopt and oversee Best Management Practices Guidelines that include:

- Alternatives to impervious surfaces in new development, redevelopment, or public improvement projects to reduce urban runoff into storm drain system and creeks;

- Site design requirements that work with the natural topography and drainages to the extent practical to reduce the amount of grading necessary and limit disturbance to natural water bodies and natural drainage systems; and
- Recommended native planting and vegetation for landscaping to absorb and filter fertilizers, pesticides and other pollutants.

WM4.1d Stormwater Management Program to Protect Agriculture

Develop a stormwater management program in collaboration with the City to minimize damage to agricultural areas from the conveyance of floodwaters from urban areas of the Valley.

The program should require review of surface water discharge projected for proposed development projects to ensure that the calculated surface water discharges do not exceed the capacities of area drainage systems.

WM4.1e Streambank Protection

Develop, adopt, and oversee Best Management Practices for bank stabilization and erosion control to prevent erosion and siltation in drainage swales and streams.

Policy WM 4.2: Protect water supplies from adverse impacts.

WM4.2a Limited Sewer Extensions

Confine new sewers and sewer extensions to urban and suburban areas. Alternative sewage treatment systems, rather than sewers, should be used to solve existing water quality problems outside the urban and suburban areas.

WM4.2b Water Quality

Reduce impacts to water quality from community sewage systems and on-site septic systems.

WM4.2c Sewer Treatment Facilities

Support increased sewage treatment facility capacity to serve the future needs of the Ukiah Valley.

WM4.2d Cost of New Development

Ensure that the cost of providing sewer and water service to new development proposed outside existing service areas should be borne solely by those proposing the development, thus eliminating any financial burden to existing customers for any required expansion of the sewer and water system network to serve such development.

Policy WM4.3: Support public education regarding water pollution prevention and mitigation programs.

WM4.3a Public Information and Outreach

Prepare guidelines for water quality source control program and conduct water quality education programs.