

NAPA COUNTY GENERAL PLAN (2008)

CONSERVATION ELEMENT: WATER RESOURCES

The Napa County General Plan is the “constitution” or policy framework that guides all decisions related to land use and development in unincorporated Napa County. As required by State law, the General Plan is made up of different chapters or “elements” that address topics such as land use, transportation, housing, and resource conservation.

The Conservation Element provides goals, policies, and action items related to open space conservation as well as a wide range of other topics that together comprise the natural environment of Napa County, including its natural resources and its water resources. The goals and policies contained in the Conservation Element also address climate change and sustainable practices for environmental health related to water, energy conservation, air pollutant, greenhouse gas emissions, clean energy generation, and similar issues.

Water is one of the most complex issues related to land use planning, development, and conservation; it is governed and affected by hundreds of federal, state, regional, and local mandates pertaining to pollution, land use, mineral resources, flood protection, soil erosion, reclamation, etc.

The Conservation Element addresses water resources by providing background information, goals, policies, and action items related to water quality, quantity, and conservation, and by highlighting the importance of water supply planning and monitoring and the importance of protecting natural systems that provide water for consumptive uses and fisheries. The following is a listing of the water resources goals, policies, and action items from the General Plan:

WATER RESOURCES GOALS

Goal CON-8: Reduce or eliminate groundwater and surface water contamination from known sources (e.g., underground tanks, chemical spills, landfills, livestock grazing, and other dispersed sources such as septic systems).

Goal CON-10: Conserve, enhance and manage water resources on a sustainable basis to attempt to ensure that sufficient amounts of water will be available for the uses allowed by this General Plan, for the natural environment, and for future generations.

Goal CON-11: Prioritize the use of available groundwater for agricultural and rural residential uses rather than for urbanized areas and ensure that land use decisions recognize the long-term availability and value of water resources in Napa County.

Goal CON-12: Proactively collect information about the status of the county's surface and groundwater resources to provide for improved forecasting of future supplies and effective management of the resources in each of the County's watersheds.

Goal CON-13: Promote the development of additional water resources to improve water supply reliability and sustainability in Napa County, including imported water supplies and recycled water projects.

WATER RESOURCES POLICIES

Policy CON-41: The County will work to protect Napa County's watersheds and public and private water reservoirs to provide for the following purposes:

- a) Clean drinking water for public health and safety;
- b) Municipal uses, including commercial, industrial and domestic uses;
- c) Support of the eco-systems;
- d) Agricultural water supply;
- e) Recreation and open space; and
- f) Scenic beauty.

Policy CON-42: The County shall work to improve and maintain the vitality and health of its watersheds. Specifically, the County shall:

- a) Use all available sources of assistance to protect and enhance the Napa River and its tributaries and watershed to meet or exceed water quality standards imposed by state and federal authorities (e.g., pursue grants and other funding opportunities to assist in the identification, testing, and improvement of individual septic as well as community waste disposal systems, and to support watershed monitoring/sampling and scientific understanding to inform and develop effective and targeted management options in an adaptive and locally driven manner).
- b) Reduce water pollutants through education, monitoring, and pollutant elimination programs (e.g., watershed education and monitoring programs identified in the Watershed Information Center and Conservancy (WICC) Strategic Plan and Napa County/Resource Conservation District (RCD) Watershed Programs, and pollution reduction goals outlined in Napa County's Phase II National Pollution Discharge Elimination System (NPDES) General Permit from the State Water Board).
- d) Support environmentally sustainable agricultural techniques and best management practices (BMPs) that protect surface water and groundwater quality and quantity (e.g., cover crop management, integrated pest management, informed surface water withdrawals and groundwater use).

- e) Promote and support the use of recycled water wherever feasible, including the use of tertiary treated water, to help improve supply reliability and enhance groundwater recharge.
- h) Recognize that efforts to protect and preserve water for wildlife habitat and watershed health in Napa County can have long term benefits related to adequate water supplies and water quality. [Implemented by Action Items CON WR-1, 4, and 7]

Policy CON-44: The County shall identify, improve, and conserve Napa County's surface water resources through the following measures:

- a) Evaluate and develop land use policies resulting in the appropriate density and mix of impervious surface and stable vegetation cover to improve water quality and reduce surface water pollution and siltation within domestic water supply watersheds.
- b) Encourage public agencies and private individuals to explore environmentally sensitive ways to store winter runoff in consultation with the State Department of Water Resources and other regulatory agencies.
- c) Promote a balanced approach to managing reservoir outflows, particularly municipal supply reservoirs, through coordination with cities and town to maintain a reliable water supply for domestic uses, minimize flooding, and preserve fish habitat and riparian vegetation.
- d) Work with other agencies to develop a comprehensive understanding of potential deficiencies in surface water supplies, and coordinate with private property owners on a voluntary basis to collect additional surface water data and implement an expanded voluntary monitoring effort to ensure development of effective water management and conservation strategies where appropriate. [Implemented by Action Items CON WR-1, 4, and 7]

Policy CON-45: Protect the County's domestic supply drainages through vegetation preservation and protective buffers to ensure clean and reliable drinking water consistent with state regulations and guidelines. Continue implementation of current Conservation Regulations relevant to these areas, such as vegetation retention requirements, consultation with water purveyors/system owners, implementation of erosion controls to minimize water pollution, and prohibition of detrimental recreational uses. [Implemented by Action Item CON WR-3]

Policy CON-47: The County shall comply with applicable Water Quality Control/Basin Plans as amended through the Total Maximum Daily Load (TMDL) process to improve water quality. In its efforts to comply, the following may be undertaken:

- a) Monitoring water quality in impaired waterbodies identified by the Regional Water Quality Control Board(s).
- b) Addressing failing septic systems in the vicinity of Murphy, Browns Valley, and Salvador Creeks and throughout the County, should they be found to exist.

- e) Ensuring continued effectiveness of the National Pollution Discharge Elimination System (NPDES) program and storm water pollution prevention.
- i) Developing outreach and education programs to inform land owners and managers about improving surface water quality (e.g., rural and private road maintenance, soil and vegetation retention, construction site management, runoff control, etc.) and cooperating with other governmental and non-governmental agencies seeking to establish waiver or certification programs. [Implemented by Action Item CON WR-4]

Policy CON-48: Proposed developments shall implement project-specific sediment and erosion control measures (e.g., erosion control plans and/or stormwater pollution prevention plans) that maintain pre-development sediment erosion conditions or at minimum comply with state water quality pollution control (i.e., Basin Plan) requirements and are protective of the County's sensitive domestic supply watersheds. Technical reports and/or erosion control plans that recommend site-specific erosion control measures shall meet the requirements of the County Code and provide detailed information regarding site specific geologic, soil, and hydrologic conditions and how the proposed measure will function.

Policy CON-49: The County shall develop and implement a water quality monitoring program (or programs) to track the effectiveness of temporary and permanent Best Management Practices (BMPs) to control soil erosion and sedimentation within watershed areas and employ corrective actions for identified water quality issues (in violation of Basin Plans and/or associated TMDLs) identified during monitoring. [Implemented by Action Item CON WR-4]

Policy CON-50: The County will take appropriate steps to protect surface water quality and quantity, including the following:

- a) Preserve riparian areas through adequate buffering and pursue retention, maintenance, and enhancement of existing native vegetation along all intermittent and perennial streams through existing stream setbacks in the County's Conservation Regulations (also see Policy CON-27 which retains existing stream setback requirements).
- b) Encourage flood control reduction projects to give full consideration to scenic, fish, wildlife, and other environmental benefits when computing costs of alternative methods of flood control.
- c) The County shall require discretionary projects to meet performance standards designed to ensure peak runoff in 2-, 10-, 50-, and 100-year events following development is not greater than predevelopment conditions.
- d) Maintain minimum lot sizes of not less than 160 acres in Agriculture, Watershed, and Open Space (AWOS) designated areas to reflect desirable densities based on access, slope, productive capabilities for agriculture and forestry, sewage disposal, water supply, wildlife habitat, and other environmental considerations.
- e) In conformance with National Pollution Discharge Elimination System (NPDES) requirements, prohibit grading and excavation unless it can be demonstrated that

such activities will not result in significant soil erosion, silting of lower slopes or waterways, slide damage, flooding problems, or damage to wildlife and fishery habitats.

- f) Adopt development standards, in conformance with NPDES Phase II requirements, for post-construction storm water control.
- g) Address potential soil erosion by maintaining sections of the County Code that require all construction-related activities to have protective measures in place or installed by the grading deadlines established in the Conservation Regulations. In addition, the County shall ensure enforceable fines are levied upon code violators and shall require violators to perform all necessary remediation activities.
- h) Require replanting and/or restoration of riparian vegetation to the extent feasible as part of any discretionary permit or erosion control plan approved by the County, understanding that replanting or restoration that enhances the potential for Pierce's Disease or other vectors is considered infeasible.
- i) Encourage management of reservoir outflows (bypass flows) to maintain fish life and riparian (streamside) vegetation.
- j) Encourage minimal use of chemical treatment of reservoirs to prevent undue damage to fish and wildlife resources.
- k) Prohibit new septic systems in areas where sewage treatment and disposal systems are available and encourage new sewage treatment and disposal systems in urbanized areas where there is high groundwater recharge potential and existing concentrations of septic systems.

Policy CON-50.5: Recognize the importance of water resources that guard against flooding and attenuate floodwaters including those rivers, creeks, streams, flood corridors, riparian habitat, and lands that may accommodate floodwater important for the purposes of groundwater recharge and stormwater management as those areas identified on the County's adopted Federal Emergency Management Agency (FEMA) Flood Insurance Rate Mapping (FIRM)¹. (see also Policy SAF-25 and Figure SAF-3)

Policy CON-51: Recognizing that groundwater best supports agricultural and rural uses, the County discourages urbanization requiring net increases in groundwater use and discourages incorporated jurisdictions from using groundwater except in emergencies or as part of conjunctive-use programs that do not cause or exacerbate conditions of overdraft or otherwise adversely affect the County's groundwater resources.

Policy CON-52: Groundwater is a valuable resource in Napa County. The County encourages responsible use and conservation of groundwater and regulates groundwater resources by way of its groundwater ordinances. [Implemented by Action Items CON WR-6 and 9]

¹ Flood Insurance Rate Map, Napa County, California, Map Number 06055CIND0A (index sheet), Effective Date: September 26, 2008

- Policy CON-52.5: Over time, the County should seek ways to increase the institutional capacity and level of expertise within the County related to groundwater issues.
- Policy CON-53: The County shall ensure that the intensity and timing of new development are consistent with the capacity of water supplies and protect groundwater and other water supplies by requiring all applicants for discretionary projects to demonstrate the availability of an adequate water supply prior to approval. Depending on the site location and the specific circumstances, adequate demonstration of availability may include evidence or calculation of groundwater availability via an appropriate hydrogeologic analysis or may be satisfied by compliance with County Code “fair-share” provisions or applicable State law. In some areas, evidence may be provided through coordination with applicable municipalities and public and private water purveyors to verify water supply sufficiency.
- Policy CON-53.5: Before authorizing any new exportation of water from the County, the County shall ensure an adequate, long term supply of ground and surface water for agriculture, conservation, domestic, industrial, and recreational uses in affected areas/watersheds.
- Policy CON-54: The County shall maintain or enhance infiltration and recharge of groundwater aquifers by requiring all projects in designated groundwater deficient areas as identified in the County’s groundwater ordinance (County Code Chapter 13.15) be designed (at minimum) to maintain a site’s predevelopment groundwater recharge potential, to the extent feasible, by minimizing impervious surfaces and promoting recharge (e.g., via the use of water retention/detention structures, use of permeable paving materials, bio-swales, water gardens, cisterns, and other best management practices). [Implemented by Action Item CON WR-5]
- Policy CON-55: The County shall consider existing water uses during the review of new water uses associated with discretionary projects, and where hydrogeologic studies have shown that the new water uses will cause significant adverse well interference or substantial reductions in groundwater discharge to surface waters that would alter critical flows to sustain riparian habitat and fisheries or exacerbate conditions of overdraft, the County shall curtail those new or expanded water uses. [Implemented by Action Item CON WR-6]
- Policy CON-56: The County shall discourage the drilling or operation of any new wells in known areas of saltwater intrusion until such time as a program has been approved and funded which will minimize or avoid expansion of salt water intrusion into useable groundwater supplies.
- Policy CON-57: The County shall work with appropriate agencies and districts to develop an understanding of potential groundwater deficiencies and coordinate with private property owners to voluntarily collect groundwater data, including implementing effective water management and conservation strategies and encouraging exploration and use of alternative (e.g., non-groundwater) water supplies where feasible to further conserve existing groundwater resources. [Implemented by Action Items CON WR-8 and 9]
- Policy CON-58: Recognizing the difficulty of assessing and resolving groundwater problems, the County shall periodically review and update groundwater policies and ordinances as new studies

and monitoring data become available to protect the County's surface water and groundwater resources, and implement various protective recommendations outlined in the 2050 Napa Valley Water Resources Study as appropriate (West Yost & Assoc., 2005). [Implemented by Action Item WR-9]

Policy CON-59: The County shall disseminate available information (online or in report format) on groundwater levels on an aggregated drainage basin level or other aggregated scale that is appropriate based on data availability and confidentiality. [Implemented by Action Item WR-5]

Policy CON-60: The County shall promote cost-effective water conservation and water efficiency measures that reduce water loss, waste, and water demand through the following measures:

- a) Taking a leadership role in water conservation efforts, by monitoring and publicly reporting on the County's water use, using low flow fixtures, drought-tolerant landscaping, drip irrigation, recycled water use where available and appropriate, periodic water use "audits" and other strategies to conserve water at all County-owned and operated facilities.
- b) Requiring the use of water conservation measures in areas served by municipal supplies to improve water use efficiency and reduce overall demand including, but not limited to, working cooperatively with all water providers and with developers to incorporate water conservation measures into project designs (e.g., as recommended by the California Urban Water Conservation Council), and coordination with water providers to continue to develop and implement water drought contingency plans to assist County citizens and businesses in reducing water use during periods of water shortages and emergencies.
- c) Seeking cooperative partnerships with government agencies, non-profit organizations, private industry groups, and individuals in furthering water conservation strategies in Napa County.

[Implemented by Action Item CON WR-9]

Policy CON-60.5: All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.

Policy CON-61: The County shall coordinate and collaborate with other agencies to identify, improve, and conserve Napa County's community and municipal water supply resources as follows:

- a) Environmentally sustainable water supply projects should receive priority attention, including development of sustainable alternative water supplies such as the use of recycled water or other options for non-potable uses in Carneros and the MST groundwater basins.
- b) Manage potential disruptions in water supply from reduced Sierra snow-pack and related drought conditions to ensure a stable water supply in the future by purchasing additional supplies or entitlements, including opportunities to purchase

dry year water supplies, modifying standard operational procedures and/or facilities to enhance the availability of local water resources, and planning for water supply treatment facilities and delivery systems to urbanized areas of the county. [Implemented by Action Item CON WR-7]

Policy CON-62: As stated in Policy AG/LU-74, the County supports the extension of recycled water to the Coombsville area to reduce reliance on groundwater in the MST groundwater basin and exploration of other alternatives. Also, the County shall identify and support ways to utilize recycled water for irrigation and non-potable uses to offset dependency on groundwater and surface waters and ensure adequate wastewater treatment capacity through the following measures:

- a) Require (as part of continued implementation of County Code Title 13 Division 2 provisions associated with sewer systems) verification of adequate wastewater service for all development projects prior to their approvals. This requirement includes coordination with wastewater service purveyors to verify adequate capacity and infrastructure either exists or will be available prior to operation of the development project.
- b) Use wastewater treatment and reuse facilities where feasible to reclaim, reuse, and deliver treated wastewater for irrigation and possible potable use depending on wastewater treatment standards.
- c) Require proposals for non-residential construction in the Airport Industrial Area and lower Milliken-Sarco-Tulocay Creeks Area to incorporate dual plumbing to allow for the use of non-potable/recycled water when such water becomes available.
- d) Encourage the use of non-potable/recycled water wherever recycled water is available and require the use of recycled water for golf courses where feasible.

Policy CON-63: The County will support the work of the Watershed Information Center and Conservancy (WICC) Board as a clearinghouse for watershed information, a forum for citizen and interagency discussion and cooperation, and development and coordination of watershed monitoring efforts and strategic planning. [Implemented by Action Items CON WR-4, 7, 8, and 9]

Policy CON-64: The County shall monitor the rise in sea levels and resulting saltwater intrusion into surface waters and use adaptive management strategies to modify County practices when warranted. [Implemented by Action Item CON WR-4, 8, and 9]

WATER RESOURCES ACTION ITEMS

Action Item CON WR-1: Develop basin-level watershed management plans for each of the three major watersheds in Napa County (Napa River, Putah Creek, and Suisun Creek). Support each basin-level plan with focused sub-basin (drainage-level) or evaluation area-level implementation strategies, specifically adapted and scaled to address identified water resource problems and restoration opportunities. Plan development and implementation shall utilize a flexible watershed approach to manage surface water and groundwater quality and quantity. The watershed planning process should be an iterative, holistic, and collaborative

approach, identifying specific drainage areas or watersheds, eliciting stakeholder involvement, and developing management actions supported by sound science that can be effectively implemented. [Implements Policies 42 and 44]

- Action Item CON WR-2: [Reserved]
- Action Item CON WR-3: Update the Conservation Regulations to establish an appropriate protective buffer (e.g., a special protection zone) in areas that drain toward any intake structure associated with the County's sensitive domestic water supply drainages, requiring specific development and performance measures to protect water quality and balance property owners' ability to use their land and stipulating that discretionary projects must be located outside of the protective buffer wherever this is feasible. [Implements Policy 45]
- Action Item CON WR-4: Implement a countywide watershed monitoring program to assess the health of the County's watersheds and track the effectiveness of management activities and related restoration efforts. Information from the monitoring program should be used to inform the development of basin-level watershed management plans as well as focused sub-basin (drainage-level) implementation strategies intended to address targeted water resource problems and facilitate restoration opportunities. Over time, the monitoring data will be used to develop overall watershed health indicators and as a basis of employing adaptive watershed management planning. [Implements Policies 42, 44, 47, 49, 63, and 64]
- Action Item CON WR-5: Identify, map, and disseminate information on groundwater recharge areas, to the extent feasible, and provide educational materials and resource information on ways of reducing and limiting the development of non-pervious surfaces in those areas. [Implements Policy 54 and 59]
- Action Item CON WR-6: Establish and disseminate standards for well pump testing and reporting and include as a condition of discretionary projects that well owners provide to the County upon request information regarding the locations, depths, yields, drilling and well construction logs, soil data, water levels and general mineral quality of any new wells. [Implements Policy 52 and 55]
- Action Item CON WR-7: The County, in cooperation with local municipalities and districts, shall perform surface water and groundwater resources studies and analyses and work toward the development and implementation of an integrated water resources management plan (IRWMP) that covers the entirety of Napa County and addresses local and state water resource goals, including the identification of surface water protection and restoration projects, establishment of countywide groundwater management objectives and programs for the purpose of meeting those objectives, funding, and implementation. [Implements Policy 42, 44, 61 and 63]
- Action Item CON WR-8: The County shall monitor groundwater and interrelated surface water resources, using County-owned monitoring wells and stream and precipitation gauges, data obtained from private property owners on a voluntary basis, data obtained via

conditions of approval associated with discretionary projects, data from the State Department of Water Resources, other agencies and organizations. Monitoring data shall be used to determine baseline water quality conditions, track groundwater levels, and identify where problems may exist. Where there is a demonstrated need for additional management actions to address groundwater problems, the County shall work collaboratively with property owners and other stakeholders to prepare a plan for managing groundwater supplies pursuant to State Water Code Sections 10750-10755.4 or other applicable legal authorities. [Implements Policy 57, 63 and 64]

Action Item CON WR-9: The County shall adopt a Water-Efficient Landscape Ordinance for multifamily residential, industrial, and commercial developments regarding the use of water-efficient landscaping consistent with AB 325. [Implements Policy 52, 57, 58, 60, 63 and 64]

Action Item CON WR-9.5: The County shall work with the SWRCB, DWR, DPH, CalEPA, and applicable County and City agencies to seek and secure funding sources for the County to develop and expand its groundwater monitoring and assessment and undertake community-based planning efforts aimed at developing necessary management programs and enhancements.