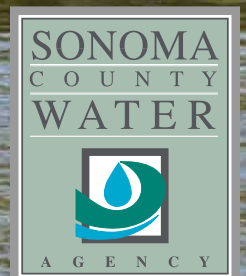




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STRATEGIC PLAN
DRAFT

The Water Agency provides high quality drinking water to over 600,000 people in Sonoma and northern Marin counties. From its large collector wells near the Russian River, the Water Agency distributes naturally filtered water to the cities of Santa Rosa, Rohnert Park, Cotati, Petaluma and Sonoma; the Town of Windsor; and Valley of the Moon and North Marin water districts. These cities and water districts distribute the water to residents and businesses.



WATER SUPPLY AND TRANSMISSION SYSTEM





WATER SUPPLY AND TRANSMISSION SYSTEM

GOAL 1

Protect drinking water supply and promote water-use efficiency

STRATEGY 1

Increase the water supply reliability of Lake Mendocino and Lake Sonoma and continue Russian River Biological Opinion compliance

Action 1: Support Forecast Informed Reservoir Operations research and implementation (also see Climate Change)

Action 2: Complete and implement actions to establish new hydrologic index for the Russian River Project

Action 3: Continue to monitor and evaluate issues related to the reliability of Lake Mendocino

Action 4: Monitor and participate in PG&E's Potter Valley Project hydroelectric relicensing process

Action 5: Continue to implement the Reasonable and Prudent Alternatives for the Russian River Biological Opinion

Action 6: Continue quagga mussel quarantine program and pursue funding for monitoring

STRATEGY 2

Monitor and protect the Water Agency's water rights, and respond to legal and regulatory challenges that affect our water supply

Action 1: Maintain reliability of Water Agency's water rights

Action 2: Continue monitoring water rights-related activities in the watershed that could affect the Water Agency's water rights

Action 3: Update and maintain planning documents such as Integrated Regional Water Management Plans (IRWMP), Urban Water Management Plans (UWMP), and Local Hazard Mitigation Plans (LHMP)



STRATEGY 3

Support science-based management of groundwater and surface water resources

Action 1: Support the formation of Groundwater Sustainability Agencies (GSAs)

Action 2: Support the continued evaluation of groundwater banking

Action 3: Support the continued evaluation of conjunctive water use

Action 4: Optimize water supply sources

Action 5: Continue to manage water supply resources at the local level

STRATEGY 4

Improve the efficient use of water in the Water Agency's service area

Action 1: Increase recycled water storage, distribution, and use

Action 2: Monitor and prevent water loss

Action 3: Continue to promote water-use efficiency and the Sonoma-Marín Saving Water Partnership through outreach and education

Action 4: Support and strengthen partnerships with Water Contractors and community



GOAL 2

Maintain and improve the reliability of the Water Transmission System

STRATEGY 1

Assess, maintain and upgrade Water Transmission System infrastructure

- Action 1: Install remote chlorine monitors at Caissons 3, 4 & 5 and the Mirabel Chlorine Plant
- Action 2: Install flow control between Wohler and Mirabel facilities
- Action 3: Evaluate condition of Water Transmission system aqueducts particularly in areas with limited accessibility
- Action 4: Evaluate feasibility of creating looped aqueducts
- Action 5: Develop a plan and schedule for replacing inflatable rubber dam
- Action 6: Identify and replace obsolete water transmission system equipment, hardware, and software
- Action 7: Improve efficiency in managing the water metering system
- Action 8: Evaluate efficiency and opportunities for improving the River Diversion Structure (RDS)

STRATEGY 2

Invest in research to improve Water Transmission system performance

- Action 1: Increase understanding of riverbank filtration processes
- Action 2: Stay abreast of trends, developments and research
- Action 3: Identify, adopt and implement new technologies

The Water Agency manages and operates eight different sanitation districts and zones throughout Sonoma County that serve over 50,000 people. These include the Sonoma Valley, Russian River, Occidental and South Park County sanitation districts and the Geyserville, Penngrove, Sea Ranch and Airport/Larkfield/Wikiup sanitation zones. High-quality tertiary treated recycled water is an important source of water that helps offset potable water demands. County that serve over 50,000 people. These include the Sonoma Valley, Russian River, Occidental and South Park County sanitation districts and the Geyserville, Penngrove, Sea Ranch and Airport/Larkfield/Wikiup sanitation zones. High-quality tertiary treated recycled water is an important source of water that helps offset potable water demands.



WASTE WATER TREATMENT AND WATER REUSE





WASTE WATER TREATMENT AND WATER REUSE

GOAL 1

Improve operational reliability of wastewater treatment and water reuse systems

STRATEGY 1

Assess, maintain and upgrade wastewater treatment and water reuse systems

Action 1: Implement a standardized asset management plan (also see Our Organization)

Action 2: Conduct a needs assessment and develop recommendations for increasing the use of automation and telemetry where appropriate

Action 3: Conduct a needs assessment of available computer maintenance management systems to identify the system that best meet maintenance needs

Action 4: Implement Supervisory Control and Data Acquisition (SCADA) master plan (also see Information Technology)

Action 5: Continue to build and implement mobile Geographical Information System (GIS) applications for Operations and Maintenance (O&M)

Action 6: Conduct quarterly internal planning meetings for each district and zone

Action 7: Initiate implementation of hazard mitigation actions identified in the Russian River County Sanitation District (CSD) and Sonoma Valley County Sanitation District (CSD) LHMP

Action 8: Update sanitation codes, ordinances, and standards to address inefficiencies

Action 9: Prepare master plans for collection system build-out for individual districts and zones

Action 10: Establish capacity mitigation policies for each system

Action 11: Pursue opportunities to improve organizational efficiencies and clarify staffing roles for development review process



STRATEGY 2 Decrease overflows from wastewater collection systems

- Action 1: Continue to repair or replace highest priority sewer lines
- Action 2: Implement a sewer lateral inspection program to help minimize inflow and infiltration
- Action 3: Modify sanitation ordinances to address deficient private sewer laterals
- Action 4: Conduct a condition assessment of force mains

GOAL 2

Improve the financial health of wastewater treatment & water reuse systems

STRATEGY 1 Improve financial management

- Action 1: Automate collection of O&M expense data for comparison with Consumer Price Index
- Action 2: Conduct annual budget assessments, including long-term debt load assessment and update depreciation schedules
- Action 3: Increase stakeholders' understanding of infrastructure, operational and financial needs, including creation and implementation of workshops
- Action 4: Increase revenues from sale of recycled water
- Action 5: Better define infrastructure conditions and replacement priorities for the long term financial planning

STRATEGY 2 Regularly review property uses and associated discharges

- Action 1: Improve accuracy of rate collections by conducting user assessments, surveying new users and updating list of businesses
- Action 2: Evaluate and modify, as appropriate, sewer service charges for significant industrial users



STRATEGY 3

Pursue transfer of South Park County Sanitation District (CSD) and Sea Ranch Sanitation Zone (SZ) and Penngrove Sanitation Zone (SZ)

Action 1: Continue with efforts to transfer management of South Park CSD to the City of Santa Rosa

Action 2: Finalize transfer of ownership for Sea Ranch SZ to the Sea Ranch Association

Action 3: Explore transfer of operation and/or ownership of Penngrove SZ with the City of Petaluma

STRATEGY 4

Procure funding from outside sources

Action 1: Evaluate disadvantaged community status for districts and zones

Action 2: Update LHMPs for Sonoma Valley CSD and Russian River CSD every five years to qualify for FEMA funding

Action 3: Evaluate the feasibility of preparing additional LHMPs for other districts/zones and develop plans as appropriate

Action 4: Work collaboratively with the County of Sonoma Permit and Resource Management Department to ensure all costs associated with development review are fully recovered

STRATEGY 5

Expand wastewater treatment and reuse curriculum in water education program

Action 1: Identify additional funding sources to increase water education program focus on wastewater and reuse

Action 2: Look for opportunities to incorporate water reuse education into the Water Education Program and field trips

Flood risks in most communities in Sonoma County have been reduced through the construction of flood protection facilities which include flood control channels and stormwater detention reservoirs. The Water Agency maintains these flood protection facilities in a manner that balances public safety and environmental needs.



FLOOD PROTECTION





FLOOD PROTECTION

GOAL 1

Provide efficient and effective flood protection programs

STRATEGY 1

Pursue new funding sources

Action 1: Identify and pursue new funding sources (e.g. grants, taxes)

Action 2: Explore credit trading opportunities for nutrient offset, water quality and riparian mitigation

Action 3: Identify partners and fund-sharing opportunities

STRATEGY 2

Assess, maintain and upgrade flood protection infrastructure

Action 1: Conduct Hydrologic and Hydraulic (H&H) watershed modeling that incorporates the latest climate change impact forecasting

Action 2: Use H&H models to quantify current hydraulic capacity of existing flood protection systems and develop self-sustaining channel forms

Action 3: Identify chronic sediment and erosion areas and develop sediment budgets

Action 4: Assess the structural integrity of all flood control facilities, determine effectiveness and functionality within the system; prioritize identified risks

Action 5: Integrate flood protection infrastructure with Water Agency LHMP

Action 6: Conduct feasibility studies for developing new flood protection facilities (detention basins, subsurface facilities, flood plain modification/terracing and bypass channels) or modifying current facilities to increase hydraulic capacity

Action 7: Evaluate maintenance access issues at flood protection facilities and mitigate as needed



STRATEGY 3 Increase Stream Maintenance Program (SMP) effectiveness and efficiency

- Action 1: Evaluate easement obligations and quantify work on reaches not owned by the Water Agency
- Action 2: Determine cost feasibility for implementation of a self-sustaining channel approach
- Action 3: Update/revise SMP Manual (2010) to capture improvements gained from adaptive program management
- Action 4: Evaluate effectiveness of alternative restoration techniques/assessments to meet program mitigation requirements (e.g. bioengineering, hydro and direct seeding)
- Action 5: Identify and prioritize establishment of localized sediment collection areas (instream sediment basins) to reduce the need for reach-scale sediment removal
- Action 6: Establish canopy over channels to the maximum extent feasible
- Action 7: Develop vegetation templates and long term management plan for mature riparian trees
- Action 8: Improve and expand existing SMP database to better meet program record requirements and expedite annual report compilation
- Action 9: Collect, maintain and manage data on work performed under the SMP
- Action 10: Evaluate cost and effectiveness of current maintenance work approach. Consider crew type, annual schedule, work demands and priorities for field operations and ability to meet increasing work demands; identify issues and develop potential solutions
- Action 11: Evaluate and employ cost-saving technology and methods (i.e. Light Detection and Ranging and integration of geospatial data)
- Action 12: Quantify and analyze annual SMP expenditures for cost efficiencies
- Action 13: Develop a dynamic auditing process for evaluating the condition and functionality of the entire flood protection system, including methods for prioritizing responses



Action 14: Review internal process management of the SMP and flood protection system; identify areas for improved efficiencies and integrated efforts

Action 15: Continue to coordinate with other organizations on homeless issues on flood control channels

STRATEGY 4 Strengthen an integrated watershed management approach to flood protection

Action 1: Work with Resource Conservation Districts to reduce erosion in chronic sediment source areas

Action 2: Strive to develop and implement watershed improvement projects that are beyond those required for stream maintenance mitigation

Action 3: Participate integrated, multi-benefit water management plans and projects with conservation partners, including Storm Water Resource Management Plans

Action 4: Integrate flood protection and storm water management strategies with sustainable groundwater management plans and low impact development standards

STRATEGY 5 Increase flood protection outreach and education

Action 1: Develop public outreach plan to highlight flood protection/SMP benefits to community members and decision makers

Action 2: Continue to support creek cleanups and public education regarding stormwater management and watershed awareness to reduce water pollution

Action 3: Improve coordination by holding quarterly workshops between departments/ individuals working on flood protection projects

Action 4: Update Water Agency website with information describing land management practices that would provide benefits to flood protection and watershed health

The Water Agency's enabling legislation authorizes the Agency to generate energy as one of its core services. In 2011, the Sonoma County Water Agency's Board of Directors approved an Energy Policy to guide the Water Agency's energy-related efforts. This policy directed the Water Agency towards accomplishing a Carbon Free Water program, as well as pursuing projects of regional benefit.



ENERGY





ENERGY

GOAL 1

Increase carbon free energy use and reduce greenhouse gas (GHG) emissions

STRATEGY 1

Reduce electricity costs

- Action 1: Procure cost effective carbon free power to meet Water Agency electricity needs
- Action 2: Explore energy load shifting and energy storage opportunities to reduce net power consumption and costs
- Action 3: Integrate electrical demand monitoring with SCADA Master Plan
- Action 4: Establish efficiency guidelines for electrical design

STRATEGY 2

Conduct audits and complete retrofits to optimize efficiency of buildings and operations

- Action 1: Establish a regular audit schedule for Water Agency facilities
- Action 2: Evaluate opportunities for increasing energy efficiency

STRATEGY 3

Reduce GHG emissions associated with vehicle use

- Action 1: Evaluate the feasibility of adding Scope 3 emissions to GHG inventory through the climate registry
- Action 2: Encourage employee clean commute (carpooling, biking, walking, teleworking, public transit)
- Action 3: Research feasibility of an incentive program for clean commuters
- Action 4: Research cost and availability of Sonoma-Marín Area Rail Transit (SMART) passes and/or discounts for Water Agency employees
- Action 5: Add charging stations for Water Agency vehicle fleet and employees



STRATEGY 4 Develop and utilize new renewable energy projects

Action 1: Continue to monitor and document GHG emissions

Action 2: Explore and implement regional alternative energy projects

Action 3: Assess operation and maintenance requirements associated with future renewable energy projects

STRATEGY 5 Pursue regional collaboration to sequester carbon and reduce GHG emissions

Action 1: Partner with local and regional organizations and agencies to implement carbon sequestration through improved land management, restoration, biochar and/or other methods and implement feasible projects

Action 2: Investigate feasibility of a mobile biomass-to energy unit in Sonoma and Mendocino counties

Action 3: Assist Sonoma Clean Power (SCP) in developing and creating water and energy efficiency and renewable energy programs

Action 4: Assist SCP in promoting Community Choice Aggregation (CCA) throughout California as a locally empowered means of choosing power sources and reducing GHG emissions

Action 5: Assess geothermal resources in Sonoma County beyond the Geysers and investigate impact on local groundwater

Action 6: Promote Carbon Free Water to other entities in the water/wastewater sector

Action 7: Begin exploring what it would take to achieve net positive energy

Action 8: Continue to invest in state and regional programs that reduce GHG emissions such as CCA and IRWMP



STRATEGY 6
Integrate energy education into the Water Agency's education and public information programs

Action 1: Implement energy-related themes in existing school program curriculum and content for public programs and tours

Action 2: Explore the feasibility of developing a partnership with an energy provider for the development of new water and energy education and public outreach programs

Action 4: Increase employee awareness and education on efficient use of energy in Water Agency



Climate variability and climate change are significant drivers that will affect the Water Agency's management of water resources in its service area in the future. The Water Agency is investing in climate adaptation planning and research to proactively develop potential adaptation strategies related to its water supply, sanitation, and flood control infrastructure and operations.



CLIMATE CHANGE





CLIMATE CHANGE

GOAL 1

Continue improving our ability to respond and adapt to climate change

STRATEGY 1 Invest in climate science and technology

Action 1: Work with United States Geological Survey, Scripps Institution of Oceanography, and National Oceanic and Atmospheric Administration to develop climate models for floods and droughts

Action 2: Incorporate downscale climate models into surface and groundwater models

Action 3: Assess potential impacts to water quality from wildfires in the Lake Sonoma and Lake Mendocino Watersheds

STRATEGY 2 Evaluate climate risk and vulnerabilities to our operations and infrastructure

Action 1: Develop and begin implementation of a plan to assess climate risks and vulnerabilities

Action 2: Develop a water shortage resilience plan

STRATEGY 3 Implement climate adaptation strategies

Action 1: Develop a financial plan and explore grant funding for climate adaptation actions

Action 2: Incorporate vulnerability results into LHMP

Action 3: Continue to develop Forecast Informed Reservoir Operation strategies (also see Water Supply)

STRATEGY 4 Participate in and form collaborative partnerships focused on climate study and adaptation

Action 1: Continue to participate in the North Bay Climate Ready Program

Action 2: Continue to participate in the Partnership for Resilience and Preparedness

Action 3: Work with future Groundwater Sustainability Agencies to evaluate climate change impacts to groundwater

The Water Agency's Information Technology Section provides secure and effective information system tools necessary for data control, use and storage, desk top computing, and for the remote and/or autonomous operation of water and wastewater treatment and reuse facilities.



INFORMATION TECHNOLOGY





INFORMATION TECHNOLOGY

GOAL 1

Increase security, usability and efficiency of Information Technology (IT) Systems

STRATEGY 1

Identify resources needed to respond to current and future IT needs

Action 1: Evaluate and address staffing needs

Action 2: Evaluate and develop enterprise asset management system
(also see Our Organization)

Action 3: Keep software/hardware current

Action 4: Provide tools to enable and support collaboration and information sharing

Action 5: Increase communication between Water Agency staff and the IT section through
blog/newsletter/intranet/frequently asked questions

STRATEGY 2

Improve cyber security

Action 1: Implement IT security policy

Action 2: Educate users through regular, required trainings

GOAL 2

Modernize remote equipment control and monitoring capabilities to improve efficiency and meet industry standards

STRATEGY 1

Modernize, standardize and secure SCADA systems

Action 1: Develop standardized naming/numbering system for all Water Agency locations and assets

Action 2: Implement SCADA Master Plan; integrate Sonoma Valley CSD into central control center

Action 3: Develop software and hardware standards to better interface with other technologies and business systems

Action 4: Improve process automation

Action 5: Continue to pursue grant funding opportunities

The Water Agency's fleet operations group maintains and repairs a vehicle fleet of approximately 220 assets. Through the use of new technology and collaboration, the group remains committed to finding new ways to increase efficiency to improve performance and build upon a workplace culture that encourages trust and innovation.

The Water Agency's Facilities Enterprise owns and manages multiuse facilities that support the Water Agency's mission. The Facilities Enterprise strives to be cost effective and responsive to immediate needs while still planning for the future.



VEHICLE FLEET & FACILITIES

ELECTRIC



VEHICLE FLEET

GOAL 1

Improve safety, reliability and cost efficiency of the vehicle fleet

STRATEGY 1

Expand driver training and education program

Action 1: Identify training needs and develop an ongoing training program

Action 2: Update Water Agency Fleet Management policies including vehicle use, driver training and Global Positioning System (GPS) data use

Action 3: Develop information sheet for employees on why GPS is used and how it works

STRATEGY 2

Continue to meet industry safety and maintenance standards, maintain regulatory compliance and update vehicle replacement guidelines

Action 1: Anticipate and prepare for new regulatory requirements such as fuel-efficiency standards

Action 2: Evaluate and implement a comprehensive fleet asset management plan (also see Our Organization)

Action 3: Refine vehicle replacement guidelines

Action 4: Establish an auto mechanic student internship program

STRATEGY 3

Reduce use of fossil fuels in a cost effective manner

Action 1: Evaluate the feasibility of transitioning from fossil fuels to alternate fuels or replacement with hybrid vehicles or other new technologies

Action 2: Seek grant funding for high efficiency vehicles





FACILITIES

GOAL 1

Provide safe, secure and efficient buildings and facilities

STRATEGY 1

Assess, maintain and upgrade facilities

- Action 1: Make better use of existing building space to accommodate current and future workspace needs
- Action 2: Review industry standards for asset management plans, develop asset management plan and develop preventative maintenance plan (also see Our Organization)
- Action 3: Evaluate and address backup power needs at all facilities
- Action 4: Develop a Water Agency specific Americans with Disabilities Act (ADA) compliance plan
- Action 5: Research new technologies when planning facilities upgrades
- Action 6: Find a new location for the backup generator and trash enclosure at 404

STRATEGY 2

Evaluate and address security and safety needs

- Action 1: Identify and contract with a security consultant to assess, identify and advise on security needs and priorities
- Action 2: Assess public access to 404 parking lot and evaluate interior security of public meetings
- Action 3: Evaluate railroad vehicle and pedestrian crossing between 204 and 404 and work with Transportation and Public Works to address pedestrian crossing

The mission of the Sonoma County Water Agency is to effectively manage the water resources in our care for the benefit of people and the environment through resource and environmental stewardship, technical innovation and responsible fiscal management.



OUR ORGANIZATION





OUR ORGANIZATION

GOAL 1

Foster an organizational culture based on open communication and employee development

STRATEGY 1

Improve internal communication systems

Action 1: Establish team to assess current internal communication systems, identify areas for improvement and develop recommendations for new communication systems

Action 2: Develop plans to implement recommended communication systems

Action 3: Evaluate effectiveness of new communication systems

STRATEGY 2

Update Mission Statement and Guiding Values

Action 1: Establish team to develop an inclusive process for updating the Mission Statement and Guiding Values

Action 2: Develop an internal and external communication plan for the updated Mission Statement and Guiding Values

STRATEGY 3

Improve employee capabilities and engagement

Action 1: Formalize and improve Water Agency's knowledge transfer processes including standard operating procedures, documentation and training

Action 2: Actively promote employee participation in training, networking and career development opportunities

Action 3: Ensure training goals are addressed as part of performance review process

Action 4: Increase use of existing County training programs

Action 5: Increase awareness of Employee Communication Council (ECC) services

Action 6: Explore methods to regularly assess employee morale



GOAL 2

Strengthen Water Agency's management and administrative processes

STRATEGY 1

Improve processes for Water Agency wide information storage, retrieval and sharing

Action 1: Establish team to conduct gap analysis, needs assessment and develop recommendations for best management practices

Action 2: Develop implementation plan and Water Agency wide rollout plan

Action 3: Measure, track and evaluate performance and identify improvements or corrective measures

STRATEGY 2

Develop and formalize asset management plan

Action 1: Establish teams to design and implement asset management plans
(Information Technology, Wastewater Treatment and Reuse, Facilities, Fleet)

Action 2: Evaluate effectiveness of new asset management plans

STRATEGY 3

Improve budget tracking and long-range financial planning

Action 1: Establish teams to develop budgeting, tracking tools and BMPs for budget accountability

Action 2: Review and improve long-range financial plans for all Water Agency funds as appropriate and develop BMPs

STRATEGY 4

Establish framework for new programs and initiatives

Action 1: Establish team to develop BMPs for new programs and initiatives

Action 2: Develop rollout plan for the recommended BMPs



STRATEGY 5 Establish standardized project management processes

Action 1: Establish team to conduct gap analysis, needs assessment and develop recommendations for BMPs

Action 2: Develop implementation plan and Water Agency wide rollout plan

Action 3: Measure, track and evaluate performance

STRATEGY 6 Improve purchasing processes

Action 1: Establish purchasing process improvement team

Action 2: Evaluate and improve coordination with County Purchasing Department

Action 3: Evaluate alternatives and develop guidelines for improvements

GOAL 3

Continue to improve emergency preparation and response to natural disasters

STRATEGY 1 Update or create critical emergency preparedness planning documents

Action 1: Update Emergency Operations Plan

Action 2: Incorporate new and updated vulnerability information and LHMPs into the emergency response plans and training activities

Action 3: Develop a comprehensive Disaster Cost Recovery Plan

Action 4: Perform site specific operational contingency planning for critical facilities

Action 5: Update existing emergency response and action plans regarding releases of pollutants into the Russian River that could impact water supply operations

Action 6: Include emergency preparedness for facilities in long-term budget planning



Action 7: Pursue grant funding for emergency preparedness

Action 8: Update existing Continuity of Operations Plan and incorporate Business Continuity Planning elements

STRATEGY 2

Create a cost-effective energy resiliency plan for key facilities and equipment in the event of a catastrophic emergency

Action 1: Conduct facility energy reliability audits beginning with wastewater treatment facilities

Action 2: Implement regular testing and third party maintenance schedule of back-up power sources and consider alternative sources as needed

Action 3: Evaluate the feasibility of storing renewable energy on a microgrid for islanding in an emergency

STRATEGY 3

Improve emergency management implementation skills

Action 1: Implement Incident Command System for scheduled projects and small-scale incidents

Action 2: Continue multi-agency and multi-jurisdictional planning, outreach and training activities, and include partner agencies in field-level training

Action 3: Increase emergency management staff training opportunities and methods

STRATEGY 4

Update LHMPs and implement natural hazard mitigation projects

Action 1: Regularly update LHMPs

Action 2: Procure funding and implement projects to mitigate highest natural hazard risks





Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, CA 95403
www.sonomacountywater.org