Agenda Item #3.1
For City Council Meeting of: October 26, 2021

CITY OF SANTA ROSA
CITY COUNCIL

TO: CITY COUNCIL
FROM: COLIN CLOSE, SENIOR WATER RESOURCES PLANNER, SANTA ROSA WATER
SUBJECT: WATER DEMAND OFFSET POLICY AND FEES

AGENDA ACTION: STUDY SESSION

RECOMMENDATION

It is recommended by Santa Rosa Water that the City Council hold a Study Session to receive information, ask questions, discuss, and provide comment regarding the proposed Water Demand Offset Policy and Water Demand Offset Fee Study, which have been developed to implement the requirement in the City's Water Shortage Contingency Plan that during water shortage emergencies that require water allocations (water rationing) new construction must offset water demand.

EXECUTIVE SUMMARY

Santa Rosa Water staff will present an informational session on the proposed Water Demand Offset (WDO) Policy, WDO Fee Study, and WDO Fee Schedule which have been developed to implement the provisions of the City's Water Shortage Contingency Plan requiring new construction to offset water demand during water shortage emergencies that require water allocations (water rationing) by the City's existing customers.

BACKGROUND

The City of Santa Rosa (City) is an urban water supplier subject to the requirements of the Urban Water Management Planning Act (UWMP Act). As required by the UWMP Act, the City prepares an Urban Water Management Plan (UWMP) every five years to assess the adequacy and reliability of water supplies for current and future needs. The UWMP projects the water needs and water supplies for the Santa Rosa community over a 25-year horizon based on anticipated development in the General Plan, population and employment growth, plumbing and building codes, water efficiency regulations, and a range of dry year scenarios.

In addition to analyzing and planning for long-term water supply needs, the City also prepares a Water Shortage Contingency Plan (Shortage Plan) every five years in

conjunction with the UWMP. The Shortage Plan is an operational plan that documents how the City will respond to differing levels of water shortage that can occur due to drought conditions, natural disaster, or human-caused catastrophic events. The Shortage Plan discusses how the City plans to respond to short-term water shortages of various levels to ensure demand does not exceed supply. Both the UWMP and Shortage Plan are submitted to the State Department of Water Resources (DWR) upon completion.

The City's water supply planning efforts support the City's vision for long-range sustainable housing and economic development needs for the health of the community.

In addition to being the retail water supplier for the City, the City is also the land use authority within its jurisdiction. As such, the City prepares, adopts, and implements land use policy in compliance with regional and State regulations. In recognition of the need for developing affordable housing, California law mandates that all California jurisdictions plan for and construct a certain amount of housing. The City's General Plan, Housing Element, and Specific Plans strive to remove barriers to development and streamline the entitlement process, in order to facilitate growth.

The City's mandate to provide housing and assure adequate water supply are balanced through long range strategies and analysis included within the UWMP, Shortage Plan, General Plan, and Specific Plans. Water supply planning and land use strategies help the City to balance long-term development needs and water demands. The Shortage Plan provides demand reduction responses for times when the City could experience water supply shortage conditions.

The proposed Water Demand Offset (WDO) Policy and WDO fee structure are tools included in the Shortage Plan to implement response actions that are necessary during severe shortages. The Shortage Plan requires that when the City Council declares a severe shortage, new construction must offset demand. The WDO Policy and the WDO fees will allow the City to address water shortage emergencies while simultaneously promoting progress on long-term strategies for housing and economic development.

The City has made significant investments for over thirty years in water use efficiency programs which have resulted in cost-effective reductions to per capita water demand. The City's gross gallons per capita per day for all types of water use decreased by 44% from 1990 (177 gpcd) to 2020 (99 gpcd). Total water use was 14% less in 2020 than in 1990. The City also requires development to be extremely water efficient by complying with the City's Water Efficient Landscape Ordinance and the State's CALGreen building code which require new development to be at least 20 percent more water efficient than existing development.

These combined efforts are critical components for successfully managing current and future water supply needs while also supporting sustainable growth and affordable housing. Despite these efforts, as noted in the Shortage Plan, there are times in projected stages of water shortage where supplies may not be sufficient to serve existing demand.

PRIOR CITY COUNCIL REVIEW

Not applicable

ANALYSIS

The purpose of the WDO Policy and WDO Fee Study is to ensure that the City can adequately address short-term water shortages and comply with Water Code section 10632(a), which requires that the City plan for water shortages by adopting an updated UWMP and an updated Shortage Plan every five years and implementing the response actions set forth in the Shortage Plan. These plans must include an urban water shortage contingency analysis, which includes a process for conducting an annual water supply and demand assessment, along with the establishment of defined water shortage levels ("stages") corresponding to progressive ranges of shortages and percentage reductions in water supply. Shortage Plans must also include response actions to achieve water use reductions when the shortage level reaches a defined stage.

Table 1 summarizes the prohibitions and restrictions on water use implemented during each Stage of a water shortage emergency. Response actions include the following prohibitions and restrictions:

Table 1: Prohibitions and Restrictions During Water Shortage Emergencies

Stage	Prohibition/Restriction*	Existing Services	New Constr.
All Stages	Water Waste Ordinance	**x**	**x**
Stage 1	Hose shut off nozzles required	**x**	**x**
	Prohibit washing hard surfaces with hose	**x**	**x**
Stage 2	Restaurants serve water only on demand	**x**	
	Lodging linens washed only on request	**x**	
Stage 3	Prohibit power washing	**x**	**x**
	Limit hours of irrigation	**x**	**x**
Stage 4	Prohibit operation of ornamental features	**x**	
Stage 5	Water allocations (rationing) (Stages 5-8)	**x**	
	Prohibit filling new pools		**x**
	Recycled water for construction dust control if avail		**x**
Stage 6	Prohibit filling/topping existing pools	**x**	
	Prohibit installing landscaping at new construction		**x**
Stage 7	Prohibit replanting landscapes at existing sites	**x**	
Stage 8	Prohibit all irrigation with potable water	**x**	**X**
* Prohibitions and restrictions from earlier stages are in effect in later stages.			

During declared water shortage emergency stages that require water allocations (water rationing), as set forth the Shortage Plan, existing water connections are assigned very restrictive individual water allocations that require water conservation sufficient to ensure that water demand does not exceed the limited supply for the duration of the water shortage emergency.

Table 2 summarizes the water allocation methodology used to assign allocations to each existing water service during water shortage emergencies during Stages 5 through 8 and the required water use reductions by customer sectors.

Table 2: Water Allocations and Impacts on Existing Customers

Sector	**Stage 5 Allocation**	**Average Percentage (%) Reduction in Water Use**
Residential	40 gpcd + 2,000 gal/mo May-Oct	20-30%
Commercial, Institutional, Industrial	85% cap	15%
Health & Safety	95% cap	5%
Irrigation services	40% of ET	54%
Sector	**Stage 6 Allocation**	**Average Percentage (%) Reduction in Water Use**
Residential	36 gpcd + 1,000 gal/mo May-Oct	30-40%
Commercial, Institutional, Industrial	80% cap	20%
Health & Safety	90% cap	10%
Irrigation services	20% of ET	77%
Sector	**Stage 7 Allocation**	**Average Percentage (%) Reduction in Water Use**
Residential	32 gpcd	36-50%
Commercial, Institutional, Industrial	75% cap	25%
Health & Safety	85% cap	15%
Irrigation services	10% of ET	88%
Sector	**Stage 8 Allocation**	**Average Percentage (%) Reduction in Water Use**
Residential	28 gpcd	45-55%
Commercial, Institutional, Industrial	70% cap	30%
Health & Safety	80% cap	20%
Irrigation services	No allocation	100%
gpcd = gallons per capita per day *ET – Evapotranspiration*		

When the City is experiencing shortage emergency stages that require existing customers to adhere to very restrictive water allocations, no water is available for new demand. To ensure that development can continue consistent with the City's water conservation policies, while acknowledging and responding to the severity of the housing shortage crisis, the Shortage Plan allows development to continue so long as developers offset new water demand that is created by their projects.

The Shortage Plan requires that construction must offset new water demand. The offsets required in the 2020 Shortage Plan adopted by City Council on June 8, 2021 for Stages 5 through 8 are shown in **Table 3**.

Table 3: Current Water Demand Offset Requirement

Shortage Stage	Offset Required
Stage 5	100% offset
Stage 6	200% offset
Stage 7	300% offset
Stage 8	400% offset

While developing the WDO Policy, an interdepartmental team determined that a 100 percent offset will achieve a net zero impact on water demand during severe water shortage emergencies of Stages 5 through 8. Therefore, Santa Rosa Water staff is preparing an Amended 2020 Shortage Plan for City Council consideration, with a revised offset requirement of 100 percent for Stages 5 through 8, as shown in **Table 4.**

Table 4: Proposed Water Demand Offset Requirement

Shortage Stage	Offset Required
Stage 5 - 8	100% offset

The WDO Policy implements the WDO requirements of the Shortage Plan during water shortage emergency stages that require implementation of water allocations. This will be done through the payment of a fee that will be used to implement demand management efforts, water supply projects, and/or conservation programs in order to offset the new demand, and the WDO Fee Study describes the basis for the WDO fees and structure.

After the WDO Policy takes effect, the WDO Policy and requirement to pay WDO fees when the City is in certain declared stages of shortage would apply to all development projects, public and private, that would increase water demand and be subject to new or increased connection fees. The City will implement a process to make it clear at the time an application for a building permit is submitted that the provisions of the WDO Policy

apply. Projects that had applied for a building permit prior to the adoption of the WDO Policy would not be subject to the provisions of the WDO Policy.

Alternatives to offsets were considered during the development of the Water Demand Offset Policy. **Table 5** summarizes the alternatives considered and the reason each is not recommended at this time.

Table 5: Alternatives to Water Demand Offset Fee

Alternative	Constraints
Moratorium	Housing crisis & economic vitality
Require developer to provide new water supply	2-3 years to permit public water supply
Require developer to offset demand with water conservation projects in service area	Significant challenges completing projects Administrative cost recovery still needed (inspections, assessments, monitoring)

Under the proposed WDO Policy provisions, all construction projects would have to complete and submit to the City a WDO Application as part of the building permit application process. After the development project has submitted a WDO Application, staff would review the WDO Application and request any corrections and/or additional information needed.

Staff would finalize the determination of the WDO fee that would be required for the project, include this in a WDO Agreement, and prepare the WDO Agreement for signatures. The WDO Agreement would have to be executed and submitted to the City prior to issuance of a building permit.

Payment of WDO fees would be required when the development project requests building permit final or when any type of occupancy is requested, and the fees would be due if a declared water shortage emergency condition exists at that time and requires water allocations for existing customers and water demand offsets for construction projects. If a declared water shortage emergency condition requiring water allocations for existing customers and water demand offsets for construction projects does not exist when the project requests building permit final, payment of the WDO fees would not be required.

To develop the WDO fee structure, the WDO Fee Study considered water use factors for new development and programmatic costs and water use reductions associated with implementing specific water saving programs at existing water customer sites. Water use factors were determined by examining the water use of existing customers, based on data from the most recent four fiscal years (FY 2018 through FY 2021). City staff provided information on current water conservation measures, costs, and water savings. Staff and the financial consultant jointly developed estimates for a standardized approach for

determining the cost of measures that would provide lasting and measurable water savings benefits.

Programmatic costs and associated water savings were based on an analysis of three water saving programs that could be quickly implemented by the City, would likely generate high participation rates, and would result in sustained water savings. The programs include (1) direct install bathroom conversions consisting of installation of high efficiency toilets, faucet aerators, and showerheads, as well as installation of kitchen faucet aerators by qualified licensed plumbing contractors, (2) enhanced rebates for high efficiency residential clothes washer upgrades, and (3) enhanced rebates for ornamental turf conversion to low water using landscape at commercial, industrial, and institutional (CII) sites. The WDO Fee Study is based on the weighted average of the estimated costs and water savings associated with those three programs. Analysis of these program costs does not imply that the City is limited in the future to only those programs. The water utility could use WDO Fee revenue on any programs or measures that would achieve the needed water demand offsets.

The proposed WDO Fee structure delineates fees for different types of development , with differing fees set forth for residential development and some other development types based on the size of the development. The Draft 2021 WDO Fee Study report is attached, and the draft fee schedule is provided in **Table 6**.

Table 6: Proposed WDO Fee Schedule (draft)

Type of Development	WDO Fee
Residential Per Housing Unit	
Single Family Residential	
Small Lot (6,000 sq ft and under)	$1,964
Large/Medium Lot (over 6,000 sq ft to 1 acre)	$2,782
Large Lot (over 1 acre)	$5,047
Duplexes and Triplexes per unit	$1,649
Condos, Apartments, Mobile Homes per unit	
With separate irrigation service	$1,259
Without separate irrigation service	$1,498
Eligible ADUs, Senior Housing, Single Room Occupancy, and Small, High-Density Apartments per unit	$868
Commercial, Industrial, Institutional and Irrigation (CII)	
Per thousand-gallon unit (TGAL) per month	$415

To account for inflation, the City would adjust the WDO Fees on an annual basis at the beginning of the calendar year (January 1) starting in 2023, using the Engineering News Record's 20-Cities CCI (20-cities CCI). The 20-cities CCI is a broadly accepted

construction cost index that attempts to reflect the monthly changes in general construction and labor costs. Adjusting WDO Fees annually using this index helps the City maintain fees commensurate with inflationary cost changes between periodic comprehensive updates. The draft WDO Fees have been indexed to a 20-cities CCI value of 12,464 (August 2021).

The City would update WDO Fee calculations whenever it is updating the Water Shortage Plan in accordance with the statutory requirements. The update to the Shortage Plan is scheduled to occur every five years, and when undertaking the update, the City would seek to ensure that the fee structure will continue to effectively offset the new water demand created by development.

If a development project wished to protest the final WDO Application decision of staff regarding determination of the project's water demand and/or the required WDO fee, the development project would have to submit a written protest to the Board of Public Utilities within fifteen (15) days of notice of the final staff decision. If a development project wished to appeal the decision of the Board of Public Utilities, the development project would have to submit a written appeal to the City Council of the final decision of the Board of Public Utilities.

FISCAL IMPACT

There is no fiscal impact to the Water Department as funds needed for implementing the WDO Policy would be collected from the proposed project. Any received WDO fees would be segregated into a restricted fund and used exclusively for City demand management efforts, water supply projects, and/or water conservation programs to offset new water demands. The restricted fund would be administered with a job ledger account to track fee use, quantify implementation progress, and maintain compliance with the Mitigation Fee Act (Gov. Code Section 66000 and following).

ENVIRONMENTAL IMPACT

The WDO Policy implements the Water Shortage Contingency Plan that is required by the UWMP Act. Water Code Section 10652 states that CEQA does not apply to the preparation and adoption of plans developed to comply with the UWMP Act or to the implementation of actions to accomplish the requirements to reduce consumption during shortages consistent with the terms of a Shortage Plan. Therefore, this WDO Policy is not subject to environmental review under CEQA.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

The City Council/Board of Public Utilities Liaison Meeting discussed the proposed WDO Policy and WDO Fee Study on October 5, 2021.

The Board of Public Utilities held a Study Session and reviewed the proposed WDO Policy and provided input on October 7, 2021.

The Planning Commission reviewed the proposed WDO Policy and provided input on October 14, 2021.

NOTIFICATION

Not applicable.

ATTACHMENTS

- Attachment 1 – Draft Water Demand Offset Policy
- Attachment 2 – Draft 2021 Water Demand Offset Fee Study
- Attachment 3 – WDO Outreach Letter

CONTACT

Colin Close, CClose@srcity.org, (707) 543-4524