

## COUNCIL AGENDA REPORT

### RECOMMENDATION:

Conduct the first reading and authorize the adoption of Ordinance No. XXXX (“Ordinance”), An Ordinance of the City Council of the City of [] Adding a New Chapter [] (Water Efficient New Development) to Title [] of the City of [] Municipal Code Related to Requirements for New Development that Promote Water Use Efficiency and the Development of Alternate Sources of Water Supply, establishing rules and regulations to help ensure that new development is poised to be water efficient in order to extend the City’s water supplies.

### BACKGROUND:

In 2015, the Santa Clara County Water Efficient New Development Task Force (“Task Force”) was formed, including representatives from Santa Clara County, several cities (Cupertino, Morgan Hill, Mountain View, Palo Alto, and Sunnyvale), Santa Clara Valley Water District, Sustainable Silicon Valley, and Joint Venture Silicon Valley. The goal of the Task Force was to develop a Model Water Efficient New Development Ordinance to be adopted by jurisdictions in Santa Clara County to ensure that new development is poised to be water efficient in order to extend the region’s water supplies. The Task Force met for about eighteen (18) months and developed the initial draft of a Model Water Efficient New Development Ordinance, conducting research on existing ordinances of other jurisdictions containing similar requirements and coming to agreement on key content. The Task Force solicited input from a variety of other stakeholders, including the Santa Clara Valley Water District Agricultural Water Advisory Committee, Santa Clara Valley Water District Environmental and Water Resources Committee, Santa Clara Valley Water District Landscape Committee, Santa Clara County/City Managers’ Association, water retailers, California Water Commission, Cities Association of Santa Clara County, and building officials in Santa Clara County.

In September 2018, Santa Clara Valley Water District, on behalf of the Task Force, procured the technical assistance of a qualified sustainability consulting firm to finalize the Model Water Efficient New Development Ordinance, with input from Task Force representatives, the California Building Standards Commission, and the California Energy Commission. The Model Water Efficient New Development Ordinance was finalized and used as a model for this Ordinance.

### ANALYSIS:

Climate change and the threat of recurring droughts, population growth, and imported water variability will continue to present challenges for water supply reliability in Santa Clara County, intensifying the need for locally-sourced and sustainable water supplies. Recycled and purified water sources possess these qualities while offering sufficiency of supply and reliability. In 2017, recycled water accounted for 5% of Santa Clara County’s total water use, the majority of which was used for agriculture, landscaping, and industrial purposes. In partnering with jurisdictions and water retailers in Santa Clara County, Santa Clara Valley Water District intends to purpose recycled and purified water for the provision of at least 10% of Santa Clara County’s total water

demand by 2025. The requirements in the Ordinance would supplement existing strategies and support ongoing efforts to achieve an environmentally adaptive water supply.

A monthly assessment of water supply and use trends conducted by Santa Clara Valley Water District reported that the beginning of 2018 presented “groundwater storage well within Stage 1 (Normal) of the District’s Water Shortage Contingency Plan.” However, precipitation for the beginning of 2018 was 60% of average levels at the San Jose Index Station and significantly lower than that of the Santa Cruz Mountains, the Diablo Range and South County, with snow water equivalent for the Northern Sierra falling well below normal. Such data suggests a need for water supply capable of satisfying demand while withstanding potential future drought conditions.

A variety of other jurisdictions have adopted ordinances with similar requirements to this Ordinance, including Los Angeles, Menlo Park, and San Francisco. Located in a similarly dry climate, the City of Menlo Park proposed that the green and sustainable building requirements incorporate water efficiency and recycled water measures in preparation for anticipated water supply shortfalls. City of Menlo Park adopted guidelines in March 2018 for water use budgets for new developments in the office, life sciences, and residential mixed-use zoning districts. City and County of San Francisco adopted an ordinance and implemented a program regulating onsite treated alternate water source systems. These initiatives are derived from the urgency of expected shortfalls during drought years, and they strive to ensure that buildings are both water efficient and resilient to protect the public from the impacts of such shortfalls.

In consideration of the dry climate that characterizes Santa Clara County paired with the expected impacts of climate change and population growth, efficient water resource management will become a matter of increasing importance. Specifically, waste and unnecessary use of potable water threatens the limited supply available for consumption and creates the need for water recycling and conservation measures. Buildings account for a significant portion of potable water use, and new development adds to existing potable water demands. Improving water efficiency and encouraging nonpotable water use for nonpotable applications, implemented at the design and construction phase of new developments, can help minimize the strain such developments place on potable water supplies for the life of the buildings. Reduced water use achieved through efficiency measures concurrently delivers a variety of associated environmental benefits including reduced energy use, reduced greenhouse gas emissions, water quality protection, and improved stream flows. Creating the framework within which onsite treated alternate water source systems can be installed will additionally assist in extending potable water supplies. The risk-based water quality standards that will be applied to onsite treated alternate water source systems will protect public health, safety and welfare.

#### POLICY ISSUES:

The Ordinance is subject to the requirements of California Senate Bill No. 966 (“SB 966”) and the associated updates to Article 8 (commencing with Section 13558) of Chapter 7 of Division 7 of the Water Code related to local jurisdictions that elect to establish a program for onsite treated nonpotable water systems that includes the risk-based water quality standards established by the

California State Water Resources Control board. The text of the Ordinance is in full compliance with SB 966.

Beyond the text of the Ordinance, SB 966 requires that “a local jurisdiction that does not provide water service or sewer service shall consult with a water service provider or sewer service provider, respectively, that provides water service or sewer service within the boundaries of the jurisdiction before adopting, amending, or repealing an ordinance that institutes a program for onsite treated nonpotable water system installation and regulation. In consulting with a water service provider or sewer service provider, a local jurisdiction shall give the water service provider or sewer service provider the opportunity to demonstrate that the proposed ordinance could result in a significant adverse impact” to receiving waters or to the existing sewer collection or treatment system or existing or planned centralized recycled water or potable reuse facilities or projects due to reduced flows. The City has consulted with [Agency Name(s) or internal department name(s)] in compliance with this requirement, and [no such significant adverse impacts were identified OR any such significant impacts identified were addressed in order to avoid or mitigate the impacts to the point where they are no longer significant].

Ongoing compliance with SB 966 will require the City to provide an annual report to the California State Water Resources Control Board that includes the number, location, and description of permits issued for new and replacement onsite treated nonpotable water systems, the types and quantity of nonpotable water for nonpotable end uses, water quality monitoring data, and a summary of any violations and corrective actions taken in the local jurisdiction’s program.

Requirements in the Single-Family Residential Water Waste Reduction when Heating Water section of the Ordinance make more restrictive amendments to certain provisions of Title 24 of the California Code of Regulations (“California Building Standards Code”). More specifically, these amendments are to certain provisions of Part 6 of Title 24 of the California Code of Regulations (“California Building Energy Efficiency Standards”). Section 1.1.8 of Part 2 of Title 24 of the California Code of Regulations and Sections 17958 and 18941.5 of the California Health and Safety Code provide that any city, county, or city and county may make more restrictive amendments to the provisions of the California Building Standards Code. Section 25402.1(h)2 of the California Public Resources Code and Section 10-106 of Part 6 of Title 24 of the California Code of Regulations provide that local government agencies may adopt and enforce energy standards for newly constructed buildings, additions, alterations, and repairs to existing buildings, provided the standards are cost-effective and will require the buildings to be designed to consume no more energy than permitted by the Building Energy Efficiency Standards. Local amendments to the California Building Standards Code are subject to certain requirements governed by the California Building Standards Commission (“CBSC”), and local amendments to the California Building Energy Efficiency Standards are subject to certain requirements governed by the California Energy Commission (“CEC”).<sup>1,2</sup> Key elements of these requirements are discussed below.

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<sup>1</sup> <http://www.bsc.ca.gov/Rulemaking/LocalCodeOrdinances.aspx>

<sup>2</sup> <https://www.energy.ca.gov/title24/2016standards/ordinances/>

Sections 17958.5 and 17958.7 of the California Health and Safety Code require that for each proposed local amendment to the provisions of the California Building Standards Code, the local governing body must make an express finding supporting its determination that each such local amendment is reasonably necessary because of local climatic, geological, or topographical conditions. Section 101.7.1 of Part 11 of Title 24 of the California Code of Regulations, known as the California Green Building Standards Code, provides that local climatic, geological, or topographical conditions include environmental conditions established by the city, county, or city and county. Pursuant to Sections 17958.5 and 17958.7 of the California Health and Safety Code, the provisions of the California Building Standards Code in Title 24 of the California Code of Regulations being amended and the respective express findings applicable to each amendment are summarized in and attached to the Ordinance as Exhibit A (Express Findings for Local Amendments of Building Standards).

Local amendments to the California Building Standards Code are not effective until copies of the amendment documents meeting all document filing requirements have been filed with the CBSC. Additionally, the CEC review and approval process involves posting an adopted ordinance for public comment for sixty (60) days followed by approval at a CEC Business Meeting. After adoption of the Ordinance, the City will file the required amendment documents and follow the required approval processes with the CBSC and CEC in accordance with each agency's respective requirements. A separate filing instructions document is available from Valley Water.

The model water efficiency ordinance and accompanying cost-effectiveness analysis upon which this Ordinance is based and to which this Ordinance is substantially similar were developed with informal input from staff of both the CBSC and the CEC in anticipation of each agency's respective requirements and in order to preemptively identify any potential barriers to approval, of which none were identified. The cost-effectiveness report, attached hereto as Attachment A, was updated to demonstrate compliance with the 2019 California Building Standards Code and found that the energy standards in the model water efficiency ordinance relevant to the CBSC and the CEC are cost-effective and require buildings to be designed to consume no more energy than permitted by Part 6 of Title 24 of the California Code of Regulations, and the Ordinance includes the required language stating this finding.

The triennial code adoption cycle of the California Building Standards Code impacts the timing of the Ordinance with regard to adoption, implementation, effective date, and updating. The 2016 California Building Standards Code is effective until January 1, 2020. The 2019 California Building Standards Code has been developed, adopted, and published, and it becomes effective on January 1, 2020. Section 1.1.8 of Part 2 of Title 24 of the California Code of Regulations and Sections 17958 and 18941.5 of the California Health and Safety Code specify that local amendments to the California Building Standards Code shall not be effective any sooner than the effective date of the California Building Standards Code being amended. This Ordinance amends the 2019 California Building Standards Code, and as such, it cannot have an effective date earlier than January 1, 2020.

The Ordinance is generally complementary and non-overlapping with the California Model Water Efficient Landscape Ordinance ("MWELO"), however the Ordinance includes certain requirements related to water efficient landscapes that are more stringent than MWELO,

including requirements related to water meters for landscape irrigation, irrigation nozzle precipitation rate, and swimming pool and spa covers.

The Ordinance supports one of the purposes of the Santa Clara Valley Water District stated in the Santa Clara Valley Water District Act, which is “to do any and every lawful act necessary to be done that sufficient water may be available for any present or future beneficial use or uses of the lands or inhabitants within the District.” The Ordinance also supports the Santa Clara Valley Water District Board Policy stating that “there is a reliable, clean water supply for current and future generations.” The Ordinance supports the strategy element of increasing water recycling and conservation to meet future increases in demand as stated in the Ensure Sustainability water supply strategy of Santa Clara Valley Water District’s 2012 Water Supply and Infrastructure Master Plan.

#### COSTS AND BENEFITS:

Implementation of this Ordinance will require staff time to complete both initial and ongoing relevant tasks. Initial tasks include:

1. Within ninety (90) days of adoption of the Ordinance, the **Director** or his or her designee shall establish a program for Onsite Treated Nonpotable Water systems including rules and regulations regarding the operation of Alternate Water Source Systems necessary to effectuate the purposes of this Ordinance and to protect public health and safety. This program shall include, among other elements, a Water Budget Calculator to provide to project applicants.
2. The **Director of Public Works** or his or her designee shall adopt regulations consistent with, and in furtherance of, this Ordinance.
3. **Relevant City staff** shall file the required amendment documents and follow the required approval processes with the CBSC and the CEC in accordance with each agency’s respective requirements for local amendments of building standards.
4. **Relevant City staff** shall conduct initial review of this Ordinance and its requirements in order to understand and undertake the relevant implementation tasks, program development, new development project permitting, and site plan review processes.
5. While not strictly required, it would be considered best practice for **City staff** to develop resources for new development project applicants in order to communicate the requirements of and facilitate compliance with the Ordinance. In addition to general direction on how to achieve compliance, specific resources for new development project applicants and future occupants could include suggestions for labeling demand hot water recirculation system manual controls and guidance for occupants on how to use the manual controls to operate such systems.

In addition to the aforementioned initial tasks, implementation of this Ordinance will require staff time on an ongoing basis, including in the following areas:

1. Review during the new development project permitting and site plan review processes for compliance with the requirements of this Ordinance by **Building Department** staff;
2. Review by the **Director** or his or her designee of written requests for exemption from certain requirements of this Ordinance;

3. Review by the **Director** or his or her designee of applications for Alternate Water Source Systems, including submitted Water Budget Documentation and Nonpotable Water Engineering Reports;
4. Issuance or denial of all relevant permits (operations, building, plumbing, encroachment, etc.) for the construction, installation, and/or modification of Alternate Water Source Systems by the **relevant City departments**;
5. Review and verification by the **Director** of submitted Construction Certificate Letters for Alternate Water Source Systems;
6. Inspection by the **Director** or his or her designee of any Alternate Water Source Systems as needed and appropriate to determine compliance;
7. The administration of irrigation audits of newly constructed landscape areas by **the local agency**;
8. Enforcement of relevant administrative penalties and/or pursuit of any legal remedies for violations of provisions, rules, or regulations of the Ordinance;
9. Annual reporting by the **Director** or his or her designee to the California State Water Resources Control Board that includes the number, location, and description of permits issued for new and replacement onsite treated nonpotable water systems, the types and quantity of nonpotable water for nonpotable end uses, water quality monitoring data, and a summary of any violations and corrective actions taken in the local jurisdiction's program;
10. Annual reporting by the **Director** to the **Controller** of the revenues generated by the non-refundable permit application fees for the prior fiscal year and the prior fiscal year's costs of operation;
11. Annual review by the **Controller** of the revenues generated by the non-refundable permit application fees for the prior fiscal year and the prior fiscal year's costs of operation and annual adjustment by the **Controller** of such fees to ensure they will not produce revenue that exceeds the reasonable costs of providing the services for which the fees are assessed; and
12. Adopting ordinances to update the relevant municipal code language as needed to address updates to referenced code (such as the triennial code adoption cycle for updates to the California Building Standards Code) and to make other changes as appropriate.

This Ordinance provides for the City to receive an appropriate amount of revenue to recover the costs of operation of this Ordinance through the non-refundable permit application fees as authorized by this Ordinance and as reviewed and, if necessary, adjusted, by the **Controller** on an annual basis. This Ordinance specifies that the fees shall be set such that they will not produce revenue that exceeds the reasonable costs of providing the services for which the fees are assessed, thus they are not considered a tax subject to voter approval under Proposition 26.

In the provisions of this Ordinance for which related provisions of the Building Energy Efficiency Standards include an option for HERS verification, the HERS-Verified option has been required. This should help reduce the need for field inspections and administrative burden on jurisdiction staff when reviewing project applications for compliance.

Adoption of this Ordinance and the associated rules and regulations will help deliver a variety of benefits to the City, including:

1. Helping the City manage its water resources as efficiently as possible to extend the City’s water supplies in the face of growing population, climate change, potential future drought conditions, and the need to protect and grow the City’s economy;
2. Providing reduced water use and the associated energy use reductions and environmental benefits including protecting water quality, preserving and improving stream flows, and reducing greenhouse gas emissions;
3. Assisting in meeting future water requirements of the City and addressing the impacts of new development on the City’s sanitary sewer system;
4. Protecting public health, safety, and welfare through the application of risk-based water quality standards for onsite treated alternate water source systems; and
5. Helping the City achieve its goals for water supply use and preservation by:
  - a. Promoting the values and benefits of nonpotable water use while recognizing the need to invest water and other resources as efficiently as possible;
  - b. Encouraging the use of nonpotable water for nonpotable applications; and
  - c. Replacing potable water use for irrigation with alternate water sources to the maximum extent possible.

In addition, the cost effectiveness analysis conducted on the measures in the model water efficiency ordinance upon which this Ordinance is based and to which this Ordinance is substantially similar, is attached hereto as **Attachment A**.

**CONCLUSION AND NEXT STEPS:**

Staff recommends that the City Council **conduct a first reading and authorize the adoption of Ordinance No. XXXX**, An Ordinance of the City Council of the City of [] Adding a New Chapter [] (Water Efficient New Development) to **Title []** of the **City of []** Municipal Code Related to Requirements for New Development that Promote Water Use Efficiency and the Development of Alternate Sources of Water Supply. Should the City Council adopt the Ordinance, within ninety (90) days, the **Director** shall establish a program for Onsite Treated Nonpotable Water systems including rules and regulations regarding the operation of Alternate Water Source Systems necessary to effectuate the purposes of this Ordinance and to protect public health and safety. Relevant City staff should review the Ordinance and its requirements to understand and undertake the relevant implementation tasks, program development, new development project permitting, site plan review processes, and the development of resources to communicate the requirements with new development project applicants and facilitate compliance.

Prepared by: **Name, Title**

**ATTACHMENTS:**

<b>Attachment #</b>	<b>Page #</b>	<b>Title</b>
<b>Attachment A</b>	<b>8</b>	Energy and Water Efficiency Cost-Effectiveness Study for Residential and Nonresidential New Construction