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Memorandum

To: Honorable Mayor and Members of the City Council
From: Kelly J. Salt, Special Counsel
Date: February 10, 2017
Re: Structuring the Town's Water Rates Under Current Law

I. INTRODUCTION

On January 17, 2014, Governor Jerry Brown issued a drought state of emergency declaration in response to record-low water levels in California's rivers and reservoirs as well as an abnormally small snowpack. On April 25, 2014, and April 1, 2015, Governor Brown issued subsequent emergency proclamations calling for the implementation of water reduction plans to reduce potable water usage and the adoption of emergency regulations by the State Water Resources Control Board ("State Board") relating to water conservation. Based on Governor Brown's mandate, the State Board approved regulations assigning mandatory water conservation standards ranging from 4 percent to 36 percent to individual water agencies based on their per capita water use in 2014. Under the drought regulation established by the State Board, the Town of Hillsborough (the "Town") was ordered to reduce its water consumption by 36%.

On November 15, 2015, Governor Brown extended these conservation measures until October 31, 2016. With California still experiencing severe drought despite recent rains, on February 2, 2016, the State Board adopted an extended and revised emergency regulation to ensure that urban water conservation continued in 2016. The regulation extended restrictions on urban water use through October 2016 while providing urban water suppliers more flexibility in meeting their conservation requirements. It also directed staff to report back on additional flexibility once more complete water supply information was known in April 2016.

Recognizing persistent yet less severe drought conditions throughout California, on May 18, 2016, the State Board adopted an emergency water conservation regulation that replaced the prior emergency regulation. The May 2016 regulation that was in effect from June 2016 through January 2017 required locally developed conservation standards based upon each agency's specific circumstances. It replaced the prior percentage reduction-based water conservation standard with a localized "stress test" approach. On February 8, 2017, the State Board extended this emergency regulation.

Based on the Town's current local conditions, on June 13, 2016, the Town ended mandatory water rationing and implemented voluntary water conservation. The voluntary water conservation period was extended through January 31, 2017, with a goal of reducing water usage by 10% compared to 2013 water usage within the Town.

The current drought is the latest example of the difficulty local public agencies face in providing reliable water supply to their communities. The implementation of permanent and effective water resource management practices, both in drought and non-drought years, is therefore critical to the long-term sustainable use of water in California.

One of the most frequently used water resource management tools is a tiered water rate structure. Tiered rate structures impose progressively higher rates for water service as the relative level of consumption increases. They are designed to allocate a greater share of the cost of providing service to those whose water usage creates greater demands and burdens on a local agency's water system, sources of supply, and other water resources, and therefore generates additional costs to a local agency for providing water service. Tiered rates also have the incidental effect of encouraging conservation by sending a price signal to water users that if they use more water they will have to pay more.[1]

The current rate structure has two components—a Service Charge and a Volume Charge. The service Charge is a fixed monthly charge. The Volume Charge has five tiers. In 2016 the Town engaged HF&H Consultants, LLC ("HF&H") to perform an independent cost of service and water rate study that evaluates the infrastructure, programs, and operations and maintenance costs of the Town's water services, and the rates necessary to recover and proportionately allocate the costs of those services among the Town's customers for the next five years. HF&H's analysis was memorialized in the "Town of Hillsborough Water Rate Cost-of-Service Study," dated December 12, 2016 (the "Study"). Based on the results of the Study and changes in water demand, HF&H determined that additional revenue from the Town's water service charges is required to recover its costs of providing water service and recommended that the Town restructure its rates to establish two customer classes—Residential and Non-Residential—and four tiers for its Volumetric Charge.

The Service Charge was calculated to recover a portion of the Town's fixed costs of operating and maintaining the water system, and delivering water. The proposed rates for the Service Charge are established on the basis of the size of the meter (in inches) serving a property to recover the incremental costs of sizing facilities to sufficiently deliver water to properties served by larger meters. The Volume Charge is a variable charge imposed per unit of delivered water, with one unit equal to one hundred cubic feet (HCF), or 748 gallons, and is calculated to recover a portion of the Town's fixed costs and its variable costs of providing water service and the incremental (i.e., marginal) costs associated with delivering more water to those who place the greatest demands on the Town's water system.

[1] Referred to as price elasticity, consumers respond to this price signal by reducing their consumption. *See* American Water Works Ass'n, Principles of Water Rates, Fees, and Charges ─ Manual of Water Supply Practices M1, p. 215 (6th ed. 2012).

This memorandum first explains the impact of constitutional and statutory provisions, and the court decisions interpreting them, on the Town's water rates. And second, it explains how the proposed water rates have been structured to comply with these legal mandates.

II. CALIFORNIA CONSTITUTION ARTICLE X, SECTION 2 — THE WASTE, UNREASONABLE USE AND UNREASONABLE METHOD OF USE OF WATER SHALL BE PREVENTED — AND OTHER WATER CONSERVATION MEASURES AND REQUIREMENTS IMPACTING WATER RATES

To begin, it is important to understand that the California Constitution and the California Water Code provide the framework within which public agencies may establish and enforce water conservation measures and are charged with the responsibility of managing water resources. Article X, section 2 was added to the California Constitution in 1928 as former article XIV, section 3. Article X requires that the water resources of the state "shall be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use[2] or unreasonable method of use of water be prevented." Article X further provides that the practice of water conservation "is to be exercised with a view to the reasonable and beneficial use" of water and that the right to water does not "extend to the waste or unreasonable use" of water. Cal. Const. art. X, § 2.

This constitutional mandate reflects the overriding statewide concern to responsibly and reasonably conserve and manage this vital public resource. "[A]ll water use is now governed by California Constitution article X, section 2, and accordingly, all use of water in this state must conform to the standard of reasonable use." *Wright v. Goleta Water Dist.*, 174 Cal. App. 3d 74, 87 (1985). Faced with the basic human necessity for water and its relative scarcity, the State Legislature has enacted legislation to promote the policy of Article X, conservation, water use efficiency, and equity among all State residents. In furtherance of Article X, the legislature adopted California Water Code section 100 which restates the proposition that it is the policy of the state of California that the waste or unreasonable use of water shall be prevented and the water of this state shall be conserved in the interest of the people and for the public welfare.[3]

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[2] "What is a beneficial use at one time may, because of changed conditions, become waste of water at a later time." *Tulare Dist. v. Lindsay-Strathmore Dist.* (1935) 3 Cal. 2d 489 525. In examining the question of what constitutes reasonable groundwater use, courts will look to the totality of the circumstances. "'The scope and technical complexity of issues concerning water resource management are unequalled by virtually any other type of activity presented to the courts. What constitutes reasonable water use is dependent upon not only the entire circumstances presented but varies as the current situation changes. . . .' '[W]hat is reasonable use of water depends on the circumstances of each case, such inquiry cannot be resolved *in vacuo* from statewide considerations of transcendent importance.'" *U.S. v. State Water Res. Control Bd*., 182 Cal. App. 3d 82129-130 (1986) (quoting *Environmental Defense Fund, Inc. v. E. Bay Mun. Util. Dist*., 26 Cal. 3d, 183, 194 (1980)).

[3] *See also* Cal. Water Code § 106 (declares that it is the established policy of the State that the use of water for domestic purposes, i.e., indoor public health and safety, is the highest use of water and the next highest use is irrigation, i.e., for agricultural purpose, not landscape purposes). "Domestic purposes" refers to the ordinary demands and requirements of consumers for human consumption, cooking and sanitation. *See id.* at §§ 106.3, 350; s*ee, also, id*. at § 71640 (restrictions on water use for any purpose other than household uses which a municipal water district deems to be nonessential); 520-529.7 (requires the installation of water meters and recognizes that

In addition to these conservation measures and mandates, in November 2009 a bipartisan package of five bills emerged from the state legislature's 2009 Extraordinary Session to address California's mounting water crisis. The bills passed in November 2009 and took effect January 1, 2010. Senate Bill 7X7 (2009-2010 7th Ex. Sess.) ("SB 7") proposed to protect water supplies by mandating a statewide twenty percent reduction in urban per capita water use by 2020. The state is required to make incremental progress toward achieving this goal by reducing per capita water use by at least ten percent by 2015, and both urban water suppliers and agricultural water suppliers are required to develop plans for reducing water use.

SB 7 requires urban retail water suppliers to formulate water demand reduction targets and to reduce per capita water[4] use within their service area by ten percent by 2015 and by ten percent by 2020 (the "20x2020 goal").[5] Urban retail water suppliers must report their interim and overall water use targets in their Urban Water Management Plan ("UWMP") due first in July 1, 2011, and must report their progress toward reaching their targets in their 2015 UWMP. Cal. Water Code §§ 10608(g), 10608.16(a) & (b), 10608.24(a). The Town is subject to the Urban Water Management Planning Act,[6] AB 1420,[7] and SB 7 requirements and completed its UWMP in in accordance with these requirements.

Urban water agencies may face an increasingly expansive set of water conservation laws and regulations under a new draft plan proposed jointly by five state agencies, including the State Board and the Department of Water Resources. The draft plan was developed in response to Executive Order B-37-16, which Governor Brown issued May 9, 2016 to address drought preparedness and long-term water conservation. While a number of the draft plan's provisions would be implemented under already existing authorities, other elements would require either rulemaking by state agencies or new legislation.

During the past two years, water supply agencies have had to deal with challenging emergency water conservation regulations adopted by the State Water Board in the face of a

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water metering and volumetric pricing are among the most efficient conservation tools); 370 (authorizes allocation-based water rate structures as an effective means by which waste or unreasonable use of water can be prevented in furtherance of Article X); 1009 (may require, as a condition of new service, that reasonable water-saving devices and water reclamation devices be installed to reduce water use); 10631(f)(1)(K) (urban water management plans should include a description of a public agency's water demand management measures that are or are planned to be implemented, including water conservation pricing); 78500.2(a), (c), & (d) (enacted pursuant to Proposition 204 in November 1996, it acknowledges that the limited water resources of this state must be protected and conserved and that water conservation is essential to the state's long-term economic and environmental sustainability).

[4] When calculating per capita values, an urban retail water supplier is required to determine population using federal, state and local population reports and projections as applicable. Cal. Water Code § 10608.20(f).

[5] There are several alternatives for urban water suppliers to accomplish their water use targets. For example, urban water suppliers may elect to determine and report progress toward achieving their targets on an individual or regional basis, or on a fiscal or calendar-year basis. Cal. Water Code §§ 10608.20(a), 10608.24.

[6] Cal Water Code § 10610 *et seq*.

[7] *Id.* at § 10631.5 *et seq*. (governing water demand management practices).

lingering and serious statewide drought. The draft plan moves away from the piecemeal emergency regulatory approach by calling for a new permanent water conservation regime for the State.

A key element involves a requirement that the state's 410 urban water suppliers meet new water use targets, which would be set locally based on state standards applied to unique local conditions. The proposed new approach is designed to take into account the unique climatic, demographic, geographic and land-use characteristics of each urban water agency's service area. The Executive Order requires that the new water use targets build on existing statutory requirements that the State achieve a 20 percent reduction in urban water usage by 2020. Under the proposed regime, Department of Water Resources and the State Board would develop new standards by 2020 to address four sectors:

- indoor residential per capita water use;
- outdoor irrigation;
- water lost through leaks; and
- commercial, industrial and institutional water use.

Local urban water suppliers would calculate their own unique water use targets based on the state standards, and would be required to achieve compliance by 2025. The targets would change each year because, although the standards would be permanent, the targets would be based on variable metrics including population, landscape area and evapotranspiration. The draft plan calls for suppliers to submit annual progress reports to the State, as well as monthly and annual water use data. Suppliers failing to meet their targets could face enforcement actions by the State Board.

The draft plan implementing the Executive Order contains a number of other elements, including:

- establishment of permanent monthly urban water use reporting requirements and permanent prohibitions on wasteful water practices, such as hosing down sidewalks, through State Board rulemaking;
- new measures achieved through rulemaking by several agencies to reduce water lost through leaks;
- new legislation requiring urban water suppliers to submit "Water Shortage Contingency Plans" to the State, to conduct a "Five-Year Drought Risk Assessment" every five years, and to submit a water budget forecast annually to the State;
- new actions to improve drought preparation among small water suppliers and rural communities; and
- new legislation placing water use efficiency and drought planning requirements, such as water budgets and water management plans, on suppliers of water to agricultural users.

To comply with the current and potential water conservation mandates and measures outlined above, a public agency which supplies water may adopt at any time, by ordinance or resolution, a water conservation program and implement restrictions and regulations to enforce such program. As part of a water conservation program, a water purveyor may provide incentives through rate structure design. Cal. Water Code § 375. Article X, section 2 and resulting legislative enactments designed to achieve its purposes have historically played an important role in structuring water rates to encourage conservation in California. The decision in *Brydon v. East Bay Municipal Utility District,* 24 Cal. App. 4th 178 (1994), is illustrative of how courts have addressed these water conservation mandates in the context of rate structure design.

III. *BRYDON V. EAST BAY MUNICIPAL UTILITY DISTRICT* — TIERED RATES ARE NOT A SPECIAL TAX

Water conservation through rate structure design has been expressly authorized by the State Legislature since 1993. Cal. Water Code § 375(b).[8] A tiered water rate structure designed to encourage conservation was first challenged in *Brydon v. East Bay Municipal Utility District*, 24 Cal. App. 4th 178 (1994), a case determined prior to the adoption of Proposition 218 (Article XIII D, section 6) discussed below. In *Brydon*, the utility district declared a water shortage emergency in conformance with the provisions of California Water Code section 350 and adopted a drought management program that included the establishment of a revenue neutral inclining block rate structure. Inclining block rates impose higher rates per unit of water as the level of consumption increases. The rate structure was challenged as an invalid special tax in violation of California Constitution, article XIII A, section 4 ("Article XIII A") absent two-thirds voter approval. Article XIII A was added to the California Constitution by Proposition 13 in 1978.

Proposition 13 was intended to provide taxpayer relief by limiting the property tax rate and requiring voter approval of "special taxes" imposed by cities, counties, and special districts. To implement the authorizations granted to public agencies in Article XIII A, the legislature enacted California Government Code sections 50075 and 50076. California Government Code section 50075 provides that it is the intent of the legislature to provide all public agencies with the authority to impose special taxes, pursuant to the provisions of Article XIII A. California Government Code section 50076 then excludes from the definition of special tax "any fee which does not exceed the reasonable cost of providing the service or regulatory activity for which the fee is charged and which is not levied for general revenue purposes."

The *Brydon* court found that the rate structure was reasonably designed in response to the constitutionally mandated water resource conservation requirements of Article X, section 2. The court also recognized that Water Code section 375 permits the adoption and enforcement of

[8] In an uncodified portion of the bill adopting Water Code section 375, the Legislature specifically acknowledged that conservation is an important part of the State's water policy and that water conservation pricing is a best management practice. Stats. 1993, c. 313, § 1 (A.B. 1712).

water conservation programs to achieve these requirements and specifically permits the enactment of ordinances to encourage water conservation through rate structure design. *Brydon*, 24 Cal. App. 4th at 193, 195. The court deemed it appropriate through rates to shift the costs of environmental degradation from the general public to those most responsible. The court noted that the district's rate structure reasonably reflected "the fact that it is the profligate usage of water which compels the initiation of regulated conservation measures" and that intuitively it is apparent that "such measures are necessitated predominately by those citizens least inclined toward conservation." *Id.* at 193. Thus, from the court's view "it is reasonable to allocate costs based on the premise that the more unreasonable the water use, 'the greater the regulatory job of the district.'" *Id.* (citations omitted).

Stated another way, tiered water rates reasonably reflect the proportionate cost of providing water service attributable to those parcels which use the most water and place the greatest demands on a system. "To the extent that certain customers overutilize the resource, they contribute *disproportionately* to the necessity for conservation, and the requirement that the District acquire new sources for the supply of domestic water." *Id*. at 202 (emphasis added) (citation omitted).

In conclusion, the *Brydon* court found nothing in Article XIII A to suggest that it was intended to subvert Article X, section 2, "which *mandates* water conservation and precludes 'the waste or unreasonable use or unreasonable method of use of water,'" or that it was intended "to accomplish the essential destruction of the rate setting structure of public utilities, nor the evisceration of the constitutional *mandates* compelling water conservation." *Id*. at 194-195 (emphasis added). Although *Brydon* addressed the competing concerns of Article X, section 2 with those of Article XIII A, the court's conclusion and analysis is equally applicable to the competing concerns of Article X, section 2 and Article XIII D, section 6(b).

IV. PROPOSITION 218 – ESTABLISHES SUBSTANTIVE LIMITATIONS ON WATER SERVICE FEES AND CHARGES

In November 1996, California voters approved Proposition 218,[9] which amended the California Constitution by, among other things, adding Article XIII D. Article XIII D, section 6 added a new category of fees and charges referred to as property-related fees and charges, and placed substantive limitations on the use of the revenue collected from the property-related fees and charges and on the amount of the fee or charge that may be imposed on each parcel. Additionally, it established procedural requirements for imposing new, or increasing existing, property-related fees and charges. Water service fees have been determined to be property-related fees within the meaning of Article XIII D and therefore are subject to the substantive limitations and procedural requirements related thereto. *Richmond v. Shasta Cmty. Services*

[9] Water Code section 78500.2—adopted by Proposition 204 on the same ballot as Proposition 218 and by a larger number of votes—acknowledges that the limited water resources of this State must be protected and conserved, and that water conservation is essential to the State's long-term economic and environmental sustainability.

Dist., 32 Cal. 4th 409 (2004); *Bighorn-Desert View Water Agency v. Virjil*, 39 Cal. 4th 205 (2006).

For purposes of tiered water rates, the following substantive limitations are implicated:

- revenues derived from the fee must not exceed the funds required to provide the property related service;
- the amount of a fee imposed upon any parcel or person as an incident of property ownership must not exceed the proportional cost of the service attributable to the parcel; and
- the fee may not be imposed for a service, unless the service is actually used by, or immediately available to, the owner of the property subject to the fee. A fee based on potential or future use of a service is not permitted, and stand-by charges must be classified as assessments subject to the ballot protest and proportionality requirements for assessments.

Cal. Const. art. XIII D, §§ 6(b)(1), (3), & (4).

Article XIII D, section 6, also placed the burden on the local agency imposing a property-related fee or charge to demonstrate compliance with these substantive provisions. Cal. Const. art. XIII D, § 6(b)(5). Prior to the adoption of Proposition 218, courts gave great deference to the determinations of the legislative bodies that approved property-related fees, such as water service fees. In *Brydon v. East Bay Municipal Water District*, 24 Cal.App.4th 178, 196 (1994) the court articulated this standard of review, stating: "Given the quasi-legislative nature of [a local agency's] enactment of the rate structure design, review is appropriate only by means of ordinary mandate [Citations] where the court 'is limited to a determination of whether District's actions were arbitrary, capricious or entirely lacking in evidentiary support . . . . [Citations.].'" *Brydon*, 24 Cal. 4th at 196.

In *City of Palmdale v. Palmdale Water District*, 198 Cal. App. 4th 926 (2011), however, an appellate court determined that with the adoption of Proposition 218, the validity of property-related fees has become a constitutional question which the courts are obligated to enforce. Consequently, courts should exercise their independent judgment in reviewing local agency decisions on property-related fee matters. *Palmdal*e, 198 Cal. App. 4th at 933.[10] The exercise of this independent judgment has led to disparate judicial analyses of what the substantive provisions of Article XIII D, section 6 mean when allocating the costs of providing water service. These cases are instructive in demonstrating what actions a local agency must take to ensure that the proposed rates and rate structure for its water service fees comply with the substantive provisions of Article XIII D, section 6(b).

[10] In applying its independent judgment to determine if the water service fees complied with the substantive limitations of Article XIII D, section 6(b), the *Palmdale* court relied on the decision of the California Supreme Court in *Silicon Valley Taxpayers Association v. Santa Clara Open Space Authority*, 44 Cal. 4th 431 (2008).

V. *CITY OF PALMDALE V. PALMDALE WATER DISTRICT* – ARTICLE XIII D, SECTION 6(B) MAY BE HARMONIZED WITH ARTICLE X, SECTION 2 TO ESTABLISH TIERED RATES

In *Palmdale*, the Palmdale Water District adopted an allocation based water rate structure (a form of tiered rate structure) pursuant to California Water Code section 372 *et seq*.[11] The rates were comprised of two components—a fixed monthly charge based on the size of the customer's meter and a per unit commodity charge for the amount of water used. The commodity charge had five tiers. If a customer stayed within their water budget,[12] the commodity charge would be billed at the rates established within the first tier. The Tier 1 rate was the same for all customer classifications. Depending on how much a customer exceeded their water budget, they would be billed at the rates in the next tiers, but the incremental rate increase depended on the customer's classification. For example, irrigation customers would be subject to Tier 2 rates if they exceeded their water budget by up to ten percent, whereas residential customers would not be subject to the Tier 2 rate until they exceeded their budget by up to 25 percent and commercial customers by up to 30 percent.[13] The City of Palmdale, an irrigation customer, challenged the rates, claiming irrigation customer rates exceeded the proportional cost of providing water service in violation of Article XIII D, section 6(b). The court of appeal agreed. *Id.* at 930.

The district argued that the rates were designed to encourage conservation in compliance with both Article X, section 2 and Article XIII D, section 6. California courts have long recognized that when two constitutional provisions appear to compete, their terms must be harmonized to effectuate their purposes.

> [C]onstitutional provisions must not be examined in isolation but rather in view of other provisions in the Constitution which bear on the same subject so that respective provisions can be harmonized (1) to avoid conflict, (2) to give effect to the scheme as a whole and (3) to avoid an implied repeal or partial repeal of a constitutional provision.

Calif. Bldg. Industry Ass'n v. Governing Bd. of the Newhall Sch. Dist., (1988) 206 Cal.App.3d 212, 229 (1988) (citations omitted); *accord Bd. of Supervisors of San Diego County v. Lonergan*,

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[11] In 2008 the State Legislature added authorization for allocation-based conservation pricing. Invoking Article X, section 2, the Legislature expressly made findings that "[t]he use of allocation-based conservation water pricing by entities that sell and distribute water is one effective means by which waste or unreasonable use of water can be prevented and water can be saved in the interest of the people and for the public welfare, within the contemplation of Section 2 of Article X of the California Constitution." Cal. Water Code §§ 370 – 374.

[12] A water budget is an amount of water allocated to a customer during a billing period for efficient water use based on their particular circumstance. The indoor water budget is generally based on the number of persons residing in a home, and the outdoor water is generally based on a number of factors such as the irrigable area of a parcel, climatic conditions and evapotranspiration.

[13] The differences in the rates within each tier were significant. The Tier 1 rate was established at $0.64 per unit; the Tier 2 rate was established at $2.50 per unit; the Tier 3 rate was established at $3.20 per unit; the Tier 4 rate was established at $4.16 per unit; and the Tier 5 rate was established at $5.03 per unit.

27 Cal.3d 855, 868-869 (1980); *SBAM Partners v. Wang*, 164 Cal.App.4th 903, 909 (2008). Consequently, the provisions of Article X, section 2 should be given equal dignity to those of Article XIII D, section 6. *See Silicon Valley Taxpayers Ass'n v. Santa Clara Open Space Authority*, 44 Cal. 4th 431, 447-448 (2008) (constitutional provisions should be given equal dignity).

The court recognized that California Constitution article X, section 2 may be harmonized with Article XIII D, section 6(b) to allow for budget based and tiered water rates that promote water conservation, provided conservation is attained in a manner that "shall not exceed the proportional cost of the service attributable to the parcel." *Id.* at 936.

When interpreting provisions of the state constitution, the courts aim "to determine and effectuate the intent of those who enacted the constitutional provisions at issue." *Bighorn*, 39 Cal. 4th at 212, quoting *Richmond v. Shasta Community Services Dist.*, 32 Cal. 4th 409, 418 (2004). The principles of constitutional interpretation are similar to those governing statutory construction which require that the plain meaning of the words used, *as well as those not used*, is to be reviewed and given deference. *See Delaney v. Superior Court*, 50 Cal. 3d 785 (1990); *Penner v. County of Santa Barbara*, 37 Cal. App. 4th 1672, 1677 (1995). If the language is clear and unambiguous, the plain meaning governs. *People v. Lopez*, (2003) 31 Cal. 4th. 1051, 1056 (2003). But if the language is ambiguous, the courts will consider extrinsic evidence in determining voter intent, including the Legislative Analyst's analysis and ballot arguments for and against the initiative. *People v. Canty*, 32 Cal. 4th 1266, 1281 (2004); *People v. Rizo*, 22 Cal. 4th 681, 685 (2000).

This case in effect recognizes that if the proponents of Proposition 218 had intended to eviscerate the constitutional mandates of water conservation through rate structure design, they would have done so explicitly in the ballot proposition. There is nothing, however, in Proposition 218 to suggest the voters intended to do so. *See Citizens Ass'n of Sunset Beach v. Orange County Local Agency Formation Comm'n*, 209 Cal. App. 4th 1182, 1186, 1191 (2012) (In reviewing the question of whether Proposition 218's election requirements apply to an island annexation under the Cortese-Knox Hertzberg Local Government Reorganization Act of 2000, the court held that "there is much in the very structure of Proposition 218 that, if it had been intended to apply to annexations, should have been there, but isn't. Just as the silence of a dog trained to bark at intruders suggests the absence of intruders, this silence speaks loudly. It is indicative of voter intent to affect annexation law.").

Applying its independent judgment, the *Palmdale* court found the district made no showing that its cost of delivering water service to irrigation customers is proportionately higher than its cost of delivering water service to residential and commercial customers and, therefore, irrigation customers should not be bumped into Tiers 2 through 5 sooner than other customer classes. According to the record, the court found that the efficient use of water, in keeping with the policy of water conservation, is already built into the customer's water budget allocation (the Tier 1 rate). *Id.* at 937. Consequently, the court concluded that the Tier 2 and above rates

imposed on irrigation customers exceeded the proportional cost of providing the water service. *Id.* at 937-938. This case emphasizes the importance of ensuring that there is a good administrative record to justify that the rates adopted for water service fees comply with the substantive provisions of Article XIII D, section 6(b), but it did not provide any guidance on what "proportional to the cost of the service attributable to a parcel" means. That issue was addressed in *Griffith v. Pajaro Valley Water Management Agency*, 220 Cal. App. 4th 586 (2013).

VI. *GRIFFITH V. PAJARO VALLEY WATER MANAGEMENT AGENCY* – PROPORTIONALITY IS DETERMINED AT THE CUSTOMER CLASS LEVEL

The Pajaro Valley Water Management Agency ("Agency") was created to manage the water resources of the Pajaro Valley Groundwater Basin which has been subject to chronic overdraft and saltwater intrusion, particularly near the coast. The Agency was authorized to levy groundwater augmentation charges on the extraction of groundwater for the purposes of paying the costs of purchasing, capturing, storing, and distributing supplemental water for use within the Agency's boundaries. To protect the groundwater basin, the Agency implemented a program to deliver supplemental water to some coastal well users and develop other supplemental water projects. The cost of the program was to be shared by all properties served by a well within the boundaries of the Agency upon which a groundwater augmentation charge was imposed.[14]

Inland landowners challenged the groundwater augmentation charges under Article XIII D, section 6(b). The first challenge was that the charge was not a charge for water service and therefore required voter approval.[15] The court, however, held that the augmentation charge did not differ materially from a charge on delivered water. Referencing the Proposition 218 Omnibus Implementation Act (Government Code section 53750 *et seq*.), the court acknowledged that "water service" means more than just supplying water; it includes managing and ensuring an ongoing, potable supply of water for all users, including the development and use of recycled water and other alternative supplies. *Griffith,* 220 Cal. App. 4th at 595.

The plaintiffs asserted, among other substantive challenges, that the amount imposed on their property was disproportionate to the cost of the service provided because they do not use any of the services for which the groundwater augmentation charges are imposed. Namely, they do not receive any supplemental water. Rejecting this argument, the court stated that plaintiffs' argument overlooks the fact that "'the management of the water resources . . . for agricultural, municipal, industrial, and other beneficial uses is in the public interest . . .' and [the Agency] was

[14] The theory for sharing the cost among all well users is that "'even those taking water from [inland] wells benefit from the delivery of water to [coastal users], as that reduces the amount of groundwater those [coastal users] will extract [from their own wells], thereby keeping water in [all] wells from becoming too salty.'" *Griffith*, 220 Cal. App. 4th 586, 590-591.

[15] Water, sewer, and solid waste disposal service fees are required to comply with a notice and majority protest hearing. All other property-related fees must comply with an additional voter approval process, which Article XIII D, section 6(c) refers to as an "election." The election is held only if, after mailing notice and conducting the majority protest hearing, there is not a majority protest.

created to manage the resources 'for the common benefit of all water users.'" *Griffith*, 220 Cal. App. 4th at 600. The court therefore found that the groundwater augmentation charges did not exceed the proportionate cost of providing the service because all groundwater users benefit from the Agency's groundwater management activities, not just the coastal landowners receiving supplemental water. *Id.* at 600, 602. The court's ruling supports the practice of many public agencies that require all property owners who receive the benefits of a property-related service to share in a portion of the costs of that service, including recycled water costs, other supplemental water reliability project costs, and water conservation programs.

The plaintiffs claimed that the groundwater augmentation charges were being used to fund a service that is not immediately available to property owners because the ordinance adopting the charge provided that the charge will be used to identify and determine future supplemental water projects. *Id.* at 601. The court dismissed this argument and held that identifying and determining the future needs of the Agency is part of the Agency's present-day services. The costs of planning for such future needs therefore may be recovered from charges imposed on current users. *Id.* 602.

The plaintiffs also challenged the method by which the Agency determined the amount of the charges, claiming that the resulting charges violated the proportionality requirements of Article XIII D, section 6(b). The Agency used a "revenue-requirements" method for determining its rates whereby it (1) calculated its total costs of the chargeable activities; (2) subtracted all other sources of revenue other than the augmentation charges; and (3) apportioned the remaining revenue requirement among the augmentation charge customer classes. *Id.* at 600.[16] The court acknowledged that this method for allocating costs is consistent with industry standards established by the American Water Works Association's *Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices* (the "M1 Manual"). *Griffith*, 220 Cal. App. 4th at 600. The M1 Manual is the most widely used rate setting manual among public water purveyors. This aspect of the decision provides substantial support for the proposition that

[16] The California Supreme Court in *Hansen v. City of San Buenaventura*, 42 Cal.3d 1172, 1181 (1986) described this process as follows:

> Revenue requirements are allocated to various classes [of customers] based on each group's proportionate use of the system, including use of physical plant facilities and consumption of water, among other elements. A preliminary step in determining revenue requirements is the establishment of appropriate classes among which costs will be allocated. The next step is to calculate the costs which properly should be assessed each group. For this analysis, two alternative methods exist: the cash basis and the utility basis. Very generally, the cash method sets revenue requirements based on actual operating and maintenance expenses plus allowable charges for system replacement, debt principal repayment, and other capital costs. The utility method also considers actual operating and maintenance expenses, but instead of looking to cash expenses such as system replacement and debt principal repayment, the method focuses on depreciation attributable to outside use and on rate of return on investment.

the principles and methodologies established in the M1 Manual for structuring rates for water service fees comply with the proportionality requirements of Article XIII D, section 6(b).

In addressing this claim, the court provided substantial guidance on how rates may be designed to comply with the proportionality requirements of Article XIII D, section 6(b). The court found that Article XIII D, section 6(b) does not require that property-related fees be calculated on a parcel-by-parcel or on an individual basis; rather, the court determined that grouping similar users together (i.e., calculating fees on a class-by-class basis) is a reasonable method of allocating the costs of service. In reaching this conclusion, the court recognized:

> Apportionment is not a determination that lends itself to precise calculation… . "The question of proportionality is not measured on an individual basis. Rather, it is measured collectively, considering all rate payors." Given that Proposition 218 prescribes no particular method for apportioning a fee or charge other than the amount shall not exceed the proportional cost of the service attributable to the parcel, [the Agency's] method of grouping similar users together for the same . . . rate and charging the users according to usage is a *reasonable way to apportion the cost of service*. That there may be other methods favored by plaintiffs does not render [the Agency's] method unconstitutional. Proposition 218 does not require a more finely calibrated apportion.

Id. at 601 (emphasis added) (citations omitted). Thus, the court's reasoning supports the assertion that as long as the costs of providing a property-related service are reasonably allocated across customer classes, the fee complies with the proportionality requirements of Article XIII D, section 6(b). A similar conclusion was reached in *Morgan v. Imperial Irrigation District*, 223 Cal. App. 4th 892 (2014) ("*Morgan*").

VII. *MORGAN V. IMPERIAL IRRIGATION DISTRICT* – THE DATA DETERMINING RATES DOES NOT HAVE TO BE PERFECT

In *Morgan*, the district engaged a rate consultant to prepare a cost of service study for its water service fees. The rates were challenged, in part, on the basis that the fees failed to comply with the proportionality requirements of Article XIII D, section 6(b). The court began its analysis by recognizing that the rate study followed commonly accepted professional standards developed by the American Water Works Association, including consideration of the character of the district and its customers. *Morgan*, 223 Cal. App. 4th at 899.

While some of the district's costs are shared by all users of the water system, the study demonstrated that some types of services require extra costs. The study therefore "allocated those costs only to the corresponding more expensive services." *Id.* By way of example, the

court referenced the differences in costs associated with repairing and maintaining smaller pipes that serve small parcel accounts versus larger pipes serving larger parcel accounts. "Similarly, the study took into account that municipal and industrial users *create special costs* so their charges are higher per acre-foot than agricultural users." *Id.* at 899-900 (emphasis added).

The rate structure included a volumetric charge. Among the substantive challenges asserted, the plaintiffs argued that the district's proposed rates were not proportionate to the cost of service because in calculating the volumetric charge the rate consultant had used flawed volumetric data. The district presented evidence at trial that district staff estimated the annual amount of water used by certain customers. The trial court rejected the plaintiff's substantive challenge and found that the cost of service study was very thorough and not defective. Thus, based in part on the district's reliance on the study, the trial court concluded that the district satisfied the substantive requirements of Article XIII D, section 6(b). *Id.* at 915-916.

On appeal, the plaintiffs argued the applicable standard of review requires the district to prove to the appellate court's satisfaction that the district's rates are constitutional. The court of appeal rejected this argument, noting that the plaintiffs were challenging the sufficiency of the evidence presented at trial. As such, the court must review the trial court's resolution of the factual conflicts under the substantial evidence standard. If there is substantial evidence in favor of the respondent, no matter how slight it might appear in comparison to the contradictory evidence, the judgment must be upheld. *Id.* at 916-917.

The court of appeal found that the plaintiffs failed to articulate why the evidence was insufficient. Rather, they merely cited to evidence they believed showed the district's data was inadequate. To resolve the plaintiff's challenge to the rates would require the court of appeal to reweigh the evidence and independently resolve issues of disputed facts already decided by the trial court. The court found that this was not its role under the substantial evidence standard of review. Further, the court held that it was satisfied that there was substantial evidence to support the trial court's factual determination that the district complied with the substantive requirements of Article XIII D, section 6(b) through its reliance on the cost of service study. In addition, the court noted that while the district's water measurement system was not perfect: "section 6 does not require perfection." *Id.* at 915-918; *see also*, *Howard Jarvis Taxpayers Ass'n v. City of Roseville*, 97 Cal. App. 4th 637, 647-648 (2002) ("a fee or charge must *reasonably* represent the cost of service"); *Moore v. City of Lemon Grove*, 237 Cal. App. 4th 363, 368 (2015) (courts afford agencies a *reasonable degree of flexibility* in apportioning costs).

The next case to examine what proportionality means in allocating the costs of service under Article XIII D, section 6(b) was the *Capistrano Taxpayers Association v. City of San Juan Capistrano*, 235 Cal. App. 4th 1493 (2015) decision.

VIII. *CAPISTRANO TAXPAYERS ASSOCIATION V. CITY OF SAN JUAN CAPISTRANO* – TIERED RATES ARE COMPATIBLE WITH ARTICLE XIII D, SECTION 6(B)

At issue in the *Capistrano* case were the requirements set forth in subdivisions (b)(1), (3) and (4) of Article XIII D, section 6. The City of San Juan Capistrano adopted an allocation-based rate structure in August 2012. The rate structure consisted of four water usage budgets for each customer class. The four budgets were then used as the basis for four distinct tiers of pricing. *Capistrano*, 235 Cal. App. 4th at 1499. The city was also in the process of constructing a recycled water treatment plant and related facilities, which were funded in part through its potable water service fees. *Id.* at 1501-1502.

The Capistrano Taxpayers Association sued, claiming that the city's rates exceeded the cost of providing the service and were not proportional to the cost of providing service attributable to parcels in violation of Article XIII D, section 6(b)(1) and (3). The Capistrano Taxpayers Association also claimed that because certain potable water customers do not and never will be able to receive recycled water, by charging them for the cost of constructing the recycled water facilities, they were being charged a fee for a service that is not "immediately available" to them in violation of Article XIII D, section 6(b)(4).

On appeal, the court held that the city's rates were not proportional to the cost of service because the city did not calculate the marginal (i.e., incremental) cost of providing water at the level of use represented by each tier. Specifically, the court criticized the city for not correlating its rates within each tier to the prices of water used within each tier. In interpreting the provisions of Article XIII D, section 6(b)(3), the court noted that "[i]f the phrase 'proportional cost of service attributable to *the* parcel' is to mean anything, it has to be that *article XIII D, section 6, subdivision (b)(3)* assumes that there really *is* an ascertainable cost of service that can be attributed to a specific ─ hence that little word 'the' ─ parcel." *Capistrano*, 235 Cal. App. 4th at 1505. The court later clarified that this does not mean that a utility must calculate the rate for one property and then calculate another for a property across the street. *Id.* at 1514.

Significantly, the court acknowledged multiple times in its opinion that tiered rates are "consonant" with and "not incompatible" with Article XIII D, section 6(b), provided the rates reasonably reflect the cost of service attributable each parcel:

- "tiered, or inclined rates that go up progressively in relation to usage are perfectly consonant with article XIII D, section 6, subdivision (b)(3)" (*id.* at 1497-1498);
- "[a]s we will say numerous times in this opinion, tiered water rate structures and Proposition 218 are thoroughly compatible 'so long as'—and that phrase is drawn directly from *Palmdale*—those rates reasonably reflect the cost of service attributable to each parcel" (*id*. at 1499 n. 6);
- "nothing . . . prevents water agencies from passing on the incrementally higher costs of expensive water to incrementally higher users" (*id.* at 1516);

- "nothing in *article XIII D, section 6, subdivision (b)(3)* is incompatible with water agencies passing on the true, marginal cost of water to those consumers whose extra use of water forces water agencies to incur higher costs to supply that extra water." *Id*. at 1516.

In this instance, however, the court concluded that the administrative record justifying the city's rates did not contain any breakdown as to the relative cost of each source of supply[17] and therefore did not justify an ascertainable cost attributable to specific parcels. *Id.* at 1499. For example, the court noted that there was nothing in the record to explain why the city could not calculate the costs of service at given usage levels that require it to tap into more expensive water supplies, and then bill its users in the higher tiers accordingly. *Id.* at 1516. The court stated that in calculating the rates for each tier, the city

> had to do more than merely balance its total costs of service with its total revenues—that is already covered in subdivision (b)(1). To comply with subdivision (b)(3), [the city] also had to correlate its tiered prices with the actual cost of providing water at those tiered levels. Since [the city] did not try to calculate the actual costs of service for the various tiers, the trial court's ruling on tiered pricing must be upheld simply on the basis of the constitutional text.

Id. at 1506.

The court rejected reliance on Article X, section 2 to promote water conservation as the sole basis for establishing tiers, holding the city had to show that the various usage tiers corresponded with its actual costs of delivering water in those increments. Looking to the origins of Article X, section 2, the court took a narrow interpretation of this constitutional provision, concluding that its purpose when approved by the voters was to prevent the waste of water by letting it flow "unused, unrestricted, and undiminished to the sea." *Id.* at 1510. Moreover, the court dismissed the opinion of the Court of Appeal in *Brydon* regarding the import of Article X, section 2, and tiered rate structures, concluding that case was decided prior to the adoption of Proposition 218 and has no application to post-Proposition 218 cases. *Id.* at 1512-1513.

But in holding reliance on Article X, section 2 could not serve as the sole basis for establishing tiers, the court also recognized that conservation may have some bearing on setting rates so long as the structure is also consistent with Proposition 218's cost-of-service and proportionality requirements. Taking conservation needs into account is consistent with the principle that when two constitutional provisions compete, their terms must be harmonized to effectuate their purposes. Indeed, there are a multitude of legislative enactments that have

[17]The city obtains its water from five sources of supply, including a groundwater recovery plant, five local groundwater wells, imported water, recycled water, and another retail water agency.

interpreted Article X, section 2 to be a mandate to conserve the water resources of this State and recognized tiered rates as an effective means of complying with this mandate. The Legislature has expressly recognized "conservation pricing" as a permissible demand management tool for attaining State water use goals. *See* Cal. Water Code §§ 370 et seq., 10631 (f)(1)(K)., 10730.2(d). Conservation pricing includes tiered water rates.

Determinations of the Legislature are of great significance.

> [W]here a constitutional provision may well have either of two meanings, it is a fundamental rule of constitutional construction that, if the legislature has by statute adopted one, its actions in this respect is well nigh, if not completely, controlling. When the legislature has once construed the constitution, for the courts then to place a different construction upon it means that they must declare void the action of the legislature. It is no small matter for one branch of the government to annul the formal exercise by another and coordinate branch of power committed to the latter, and the courts should not and must not annul, as contrary to the constitution, a statute passed by the legislature, unless it can be said of the statute that it positively and certainly is opposed to the constitution. This is elementary. But plainly this cannot be said of a statute which merely adopts one of two reasonable and possible constructions of the constitution.

San Francisco v. Indus. Accident Comm'n, (1920) 183 Cal. 273, 279 (1920); *accord Woodcock v. Dick*, 36 Cal.2d 146, 148-149 (1950); *Methodist Hosp. of Sacramento v. Saylor*, 5 Cal.3d 685, 692 (1971).[18]

Finally, the appellate court sided with the city that Article XIII D, section 6(b) does allow local agencies to pass on to customers the capital costs of improvements to provide additional water supplies, including building a recycling plant. *Capistrano*, 235 Cal. App. 4th at 1502. The court noted that like the supplemental water in *Griffith*, nonpotable water for some customers frees up potable water for others. *Capistrano*, 235 Cal. App. 4th at 1502 (recycled water is "part of a holistic distribution system that does not distinguish between potable and nonpotable water.") Thus, a local agency may, through a capital-intensive program, develop "what is effectively *new* water, such as recycling or desalination, and pass the costs of developing that new water to those customers whose marginal or incremental extra usage requires such new water to be produced." *Id.* at 1503.

[18] Recently, in the historic legislative package establishing a groundwater regulatory framework for California, the Legislature again specifically authorized the imposition of tiered rates for groundwater extraction charges subject to Article XIII D. Cal. Gov't Code § 10730.2(d), added by 2014 Stats., ch. 347 (the legislative package included AB 1739 (2014 Stats., ch. 347), SB 1168 (2014 Stats., ch. 346), and SB 1319 (2014 Stats., ch. 348).)

The court, however, went on to question whether residential ratepayers with very low water consumption "should be required to pay for recycling facilities that would not be necessary but for above-average consumption." *Id.* The court specifically recognized the "Proposition 218 protects lower-than-average users from having to pay rates that are *above the cost of service for them* because those rates cover capital investments their levels of consumption do not make necessary." *Id.* As will be discussed below, this concept includes not only constructing facilities to provide alternative sources of water supply to meet above-average water demand, but sizing, constructing, operating, and maintaining facilities to ensure there is sufficient capacity in a water utility's system to meet above-average water demand.

The court further noted that capital improvements entail a longer timeframe than a residential customer's normal one-month bulling cycle, and that the calculation of the true cost of water can be, given capital improvements, quite long. *Id.* at 1503; *see also Howard Jarvis Taxpayers Ass'n v. City of Roseville*, 97 Cal. App. 4th 637, 647-648 (2002) ("[W]hat it costs to provide [water] services includes all the required costs of providing service, short-term and long-term, including operation, maintenance, financial, and capital expenditures. The key is that the revenues derived from the fee or charge are required to provide the service, and may be used only for the service.") (emphasis added).

IX. RECONCILING THE COURT DECISIONS – WHAT ARE THE MARGINAL COSTS OF PROVIDING WATER SERVICE?

As is evident from the cases discussed above, the courts have interpreted the substantive provisions of Article XIII D, section 6 and the import of Article X, section 2 on water rates differently and the analysis in each of these cases turns in large part on the specific facts at issue. However, there are some helpful take-aways (listed below) from all of the cases that the Town should consider in structuring its water rates and determining how to allocate costs.

- "Water service" means more than just supplying water; it includes managing and ensuring an ongoing, potable supply of water for all users, including the development and use of recycled water and other alternative supplies and water conservation and efficiency programs. *Griffith,* 220 Cal. App. 4th at 595, 600; *Capistrano*, 235 Cal. App. 4th at 1502-1503, 1510; *see Brydon*, 24 Cal. App. 4th at 193-194, 201-202; Cal. Gov't Code § 53750(m).
- The cost of water service includes planning for and constructing capital facilities of a water system, including capital facilities that may be constructed over a multi-year period and debt service incurred to construct the facilities. *Griffith,* 220 Cal. App. 4th at 598, 601; *Capistrano*, 235 Cal. App. 4th at 1501-1503.
- The cost of water service includes all the required costs of providing service, short-term and long-term, including the costs of operating, maintaining, financing, producing, storing, supplying, treating, or distributing water from any source. *Griffith,* 220 Cal. App. 4th at 595, 600; *Capistrano*, 235 Cal. App. 4th at 1502-

1503; *Howard Jarvis Taxpayers Ass'n v. City of Roseville*, 97 Cal. App. 4th 637, 647-648 (2002); Cal. Gov't Code § 53750(m).

- Some water users create special costs and may be charged a correspondingly higher rate for their water. *Morgan*, 223 Cal. App. 4th at 892, 899-900, 908-909; *Capistrano*, 235 Cal. App. 4th at 1503, 1511; *Brydon*, 24 Cal. App. 4th at 193, 202.
- All water users who benefit from a program should have to share in the cost of the program. *Griffith,* 220 Cal. App. 4th at 600.
- Local agencies may use the M1 Manual to assist them in developing their water rates, including using the revenue requirements methodology for allocating costs of service, but they must still ascertain what the cost of service is. *Griffith,* 220 Cal. App. 4th at 600; *Morgan*, 223 Cal. App. 4th at 899-900; *Capistrano*, 235 Cal. App. 4th at 1514.
- Local agencies may pass on the incrementally higher costs of more expensive water to those who use more. *Brydon*, 24 Cal. App. 4th at 193, 202; *Capistrano*, 235 Cal. App. 4th at 1511.

Based on the forgoing court decisions, the determination of what the marginal costs of providing water service are and how they are quantified and allocated will be different for each local agency, but generally they include the incremental costs associated with: (1) specific sources of supply; (2) water conservation and efficiency programs; and (3) system capacity/peaking factors. Pertinent to the Town are the latter two cost components. Below is a summary of those cost components.

Sources of Supply. Certain sources of water may cost more to purchase, produce, treat, deliver, and/or supply. By way of example, local water captured and stored may cost a local agency significantly less than imported water purchased from a wholesale water provider. Additionally, because of the higher demands of some customers, a local agency may need to permanently acquire or develop alternative sources of supply, such as purchasing groundwater rights, developing recycled wastewater, capturing and reusing storm water, desalinating seawater or brackish groundwater, and developing previously unused local groundwater supplies. Although these supplies may also provide resiliency benefits, absent the demands of higher volume water users, reliance on these more expensive supplies might be reduced or unnecessary.

Water Conservation and Efficiency Programs. High water use drives the cost of extraordinary water conservation and efficiency programs needed to encourage customers to reduce consumption and manage a local agency's water supplies. These costs may include, for example, personnel and other costs of operating the programs, turf and appliance rebates, and education programs. While all customers may benefit from these programs, high volume users benefit both directly (e.g., receive a rebate) and indirectly (e.g., conservation frees up additional potable water). Tiered rate structures send a pricing signal to conserve water.

System Capacity/Peaking Factors. System capacity is the water system's ability to supply water to all delivery points at the time when demanded. The time of greatest demand is known as "***peak demand***." A cost of service study will analyze both the average quantity of water consumed and the peak rate at which it is consumed. Agencies must construct infrastructure to deliver water at peak times. These facilities may include, for example, wells, conveyance, treatment, and storage facilities. The incremental costs associated with creating this excess, peak capacity ("peaking costs") include designing (i.e., sizing), constructing, and operating and maintaining facilities. These costs may be appropriately allocated to those water users who place greater demands and burdens on a water system. Article XIII D, section 6 protects lower-than-average users from having to pay rates that are above the cost of service for them because those rates cover capital investments their levels of consumption do not make necessary. As discussed in the next section of this memorandum, the incremental costs of sizing the Town's water system to meet the peak demands of higher volume water users had a significant impact on how costs were allocated to the rates proposed for the Town's Volume Charge.

IX. TOWN'S WATER RATES

The Town's water rates were structured with the forgoing constitutional and statutory mandates in mind, as well as the various court decisions interpreting them. HF&H used the American Water Works Association "Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1" (the "M1 Manual") in developing the Town's water rates. The M1 Manual establishes commonly accepted professional standards for cost of service studies. *See Griffith*, 220 Cal. App. 4th at 600; *Morgan*, 223 Cal. App. 4th at 899-900. HF&H made modifications to the M1 ratemaking principles where it deemed appropriate to comply with the provisions of Article XIII D, section 6(b) given the Town's particular circumstances.

Underlying the Study are complex and interlocking spreadsheets that were developed by HF&H and used to apportion the costs of service and calculate the rates to be imposed. These spreadsheets, set forth in an appendix to the Study, comprise the rate model and include, among other things, financial data and customer usage data provided by the Town. *See* Study, Appendix Water Rate Model (hereinafter referred to as the "Rate Model"). Following the ratemaking principles of the M1 Manual, the Study followed three basic steps in developing the Town's rates: (1) determine the water utility's revenue requirements to meet operation and maintenance costs, debt service, and capital investment costs (Section III of the Study); (2) perform a cost of service analysis that equitably and proportionately allocates the revenue requirements among the customer classes (Section IV of the Study); and (3) design a rate structure (including a formula for adjusting the rates during periods water shortages) to collect the target revenue requirements of each customer class and proportionately allocate the costs of service on a parcel basis within each customer class (Section V of the Study). Each of the steps, the M1 Manual's general principles of rate structure design, and how they were used in developing the Town's rates within each step are described below.

A. STEP 1 – REVENUE REQUIREMENTS

In establishing cost-based water rates, it is important to understand that a cost-of-service methodology does not prescribe a single approach. Rather, as the First Edition of the M1 Manual noted, "the (M1 Manual) is aimed at outlining the basic elements involved in water rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements." M1 Manual at p. 5 (6th edition 2012) (quoting M1 Manual (1st ed. 1954) (emphasis added); *see also Griffith*, 220 Cal. App. 4th at 600-601 (apportionment is not a determination that lends itself to precise calculation; Proposition 218 prescribes no particular method for apportioning a fee; that there may be other methods favored by plaintiff's does not render defendant's method unconstitutional).

According to the M1 Manual, the first step in the ratemaking analysis is to determine the adequate and appropriate funding of a utility. This is referred to as the "revenue requirements" analysis. As discussed earlier in this memorandum, this analysis considers the short-term and long-term service objectives of the utility over a given planning horizon, including capital facilities and system operations and maintenance, to determine the adequacy of a utility's existing rates to recover its costs. *See* M1 Manual at pp. 4-6 (6th edition 2012) for an overview of the generally accepted rate-setting methodology; *Griffith*, 220 Cal. App. 4th at 600. In short, the revenue requirements analysis for a utility is designed to meet the first condition of Article XIII D, section 6(b) that total revenues from a fee shall not exceed the funds required to provide the service. *See Capistrano*, 235 Cal. App. 4th at 1506; *Griffith*, 220 Cal. App. 4th at 601.

Using the Town's approved budget, financial reports, operating data, and capital improvement plan, the Study determined the revenue requirements for the water utility for 2016-17 and projected future revenue requirements for later fiscal years.[19] A summary of the Town's budgeted and projected costs, current rate revenues, offsetting revenues, and net revenue requirements are set forth in the Rate Model on pages 2-4. A summary of the revenue requirement projections by fiscal year is shown in Figure I-1. Study at p. 4.

The Study examined the projected customer demand within the Town for the ensuing five years (the "Study Period"). *See Capistrano*, 235 Cal. App. 4th at 1503 ("Government Code section 53756 contemplates timeframes for water rates that can be as much as five years."). For the Study Period, it was assumed that there will be no growth in customer accounts or in water demand. Study, at p. 17.

The Study recognized that water demand varies from customer class to customer class (referred to in the Study as customer "category") and that in the Town's case, the vast majority the customers are residential customers. *Id*. The Town is unique in that its per capita water use is significantly higher than other communities that are served by the San Francisco Public Utilities Commission ("SFPUC"), the Town's wholesale water provider. *See* Study, at p. 18.

[19] The assumptions associated with certain costs increases are shown in the Rate Model on page 1.

Although demand within the Town has decreased due to a variety of reasons, including the multi-year drought, the Study anticipates that there will be some rebound in water usage during the Study Period, which will impact wholesale water purchase cost. *Id.* at pp. 18-20.

The Town is wholly reliant on SFPUC for its water supply. Increases in the cost of SFPUC wholesale water are projected to increase significantly during the Study Period. *Id.* at p. 22. The cost of SFPUC water accounts for forty percent of the water utility's annual revenue requirements and is the single largest item impacting the projected revenue requirements. *Id.* Other cost drivers impacting the revenue requirements for the Study Period include increases in operating expenses, annual debt service payments on outstanding bond obligations, and capital improvement projects and reserves. *Id.* at p. 23-30; *see also* Study, Appendix Rate Model at pp. 1-5 (summarizes revenue requirement calculations for the Study Period).

B. STEP 3 — COST OF SERVICE ANALYSIS — ALLOCATING REVENUE REQUIREMENTS TO COST COMPONENTS AND DISTRIBUTING COSTS TO CUSTOMER CLASSES

After determining a utility's revenue requirements, a utility's next step is determining the cost of service. The most commonly used method for doing so is the base-extra capacity method. This method separates costs into three components: (1) Base (the average daily water flow in the system during the year), (2) Maximum Day (the water flow in the system on the maximum day of the year), and (3) Maximum Hour (the water flow in the system during the maximum hour of the maximum day of the year). HF&H used a modified version of the base-extra capacity method of the M1 Manual by adding Base Day as a fourth component for allocating the revenue requirements to cost components of the rate structure. *Id*. at p. 31. Water demand within the Town is greatest during the summer months, when it is said to "peak." Base Day was derived by determining average winter demand within the Town, when water use is at its lowest.

The four components under the Study are therefore: (1) Base Day, (2) Average Day, (3) Maximum Day, and (4) Maximum Hour. Base Day demand represents the average daily demand in the lowest billing period of the year and does not take include capacity-related costs associated with meeting peak demand. *Id.* at pp. 31, 42. Average Day, Maximum Day, and Maximum Hour demand progressively require larger and more costly infrastructure, which in turn generate more operations and maintenance costs. Stated another way, the capacity-related costs as represented by the Average Day, Maximum Day, and Maximum Hour components represent the incremental costs to the Town in sizing its water system to meet the respective demand. *See Morgan*, 223 Cal. App. 4th at 892, 899-900, 908-909; *Capistrano*, 235 Cal. App. 4th at 1503, 1511; *Griffith,* 220 Cal. App. 4th at 595, 600; *Brydon*, 24 Cal. App. 4th at 193, 202.

Utilizing a public agency's approved budget, financial reports, operating data, and capital improvement plans, a rate study categorizes ("functionalizes") the cost components (here, Base Day, Average Day, Maximum Day, and Maximum Hour) among major operating functions to determine the cost of service. *See* M1 Manual at § II. In the Study, the two operating functions

identified were the "demand service function" and the "customer service function." Study at pp. 37-39.

The demand service function represents those operating functions associated with delivering water to customers at varying levels of demand. It includes water supply costs, transmission costs, pumping costs, storage costs, and distribution costs. *Id.* at pp. 38-39. All of these operating and capital costs are proposed in the Study to be recovered from the Volume Charge component of the Town's rates.

The customer service function includes costs related to customer accounts such as meter reading, billing and general administration. It also includes fixed costs related to the capacity of a service connection which are apportioned in proportion to the rated capacity of each meter. *Id*. at p. 39; Rate Model at pp. 5-6.

After the assets and the costs of operating those assets are properly categorized by function, the rate study allocates those "functionalized costs" to the various customer classes (e.g., residential and non-residential) by determining the characteristics of those classes and the contribution of each to incurred costs such as peaking factors or different delivery costs, service characteristics and demand patterns. The impact that these matters have on system operations generally will determine how the costs are allocated among the customer classes. *See id.* at § III; [20] Study at pp. 41-49; Rate Model at pp. 7-9.

C. STEP 4 — RATE DESIGN

Rate design is the final part of the M1 Manual's rate-making procedure and generally uses the revenue requirements and cost of service analysis to determine appropriate rates for each customer class. *See id.* at § IV. Rate design is both discretionary and quasi-legislative. *See Pac. Tel. & Telegraph Co. v. Pub. Util. Comm'n* (1965) 62 Cal.2d 634, 655; *Brydon*, 24 Cal. App. 4th at 196 (ratemaking is quasi-legislative); *see, e.g*., Cal. Water Code section 370(c) ("The Legislature does not intend to limit the discretion of public entities to evaluate and select among different methods for conserving water or to create a presumption that the election to not use a particular method is a waste or unreasonable use of water by the public entity."). When Article XIII D refers to establishing rates that are proportional to the cost of providing service attributable to a parcel, without specifying who should make that attribution or how, it preserves the legislative discretion afforded by earlier law to public agencies to determine how to allocate costs of service, provided they act reasonably and comply with the Constitution.

[20] *See also Griffith*, 220 Cal. App. 4th at 601 (parcel-by-parcel analysis is not required; "Given that Proposition 218 prescribes no particular method for apportioning a fee or charge other than that the amount shall not exceed the proportional cost of the a service attributable to the parcel, defendant's method of grouping similar users together for the same . . . rate and charging users according to usage is a reasonable way to apportion the cost of service."; *Calif. Farm Bureau Fed'n*, 51 Cal. 4th 421, 438 ("The question of proportionality [under Proposition 13] is not measured on an individual basis. Rather it is measured collectively, considering all rate payors.").

Most water rate structures include a fixed component (sometimes referred to as a base, meter, service, or readiness-to-serve charge) and a volumetric component (sometimes referred to as a commodity or a volume charge). The fixed component of the rate structure is generally based the size of the water meter serving a property and is calculated to recover a portion of an agency's fixed costs of operating, maintaining, and delivering water—e.g., personnel, billings and collection, and other similar costs—and a portion of the fixed costs related to system capacity. Such a basic service charge recognizes that, even when a customer uses no water, the public agency incurs fixed costs to maintain its ability to serve each customer on demand. *See Paland v. Brooktrails Township Cmty Servs. Dist.*, 179 Cal. App. 4th 1358, 1370-1371 (2209). The Town's proposed water rates are similarly structured with a fixed System Charge and a variable Volume Charge.

As previously noted, the Town's Service Charge has two cost components—customer accounts and customer capacity. Each customer account is allocated an equal amount of the customer account component. The amount represents the costs the Town incurs to maintain an account regardless of the capacity of the service. The capacity component of the Service Charge is based on the size of the water meter (in inches) serving a property because larger meters have the potential to demand more capacity, or said differently, exert more peaking characteristics compared to smaller meters. The typical or most common method to levy fixed charges is by meter size. Meter size is used as a proxy for the estimated demand that each customer can place on the water system. A significant portion of the Town's operating and capital costs are related to meeting such capacity requirements and maintaining the readiness to serve each connection. Utilities invest in facilities to provide capacity, and these costs must be recovered regardless of the amount of water used during a given period. The potential capacity demanded (peaking) is proportional to the potential flow through each meter size as established by AWWA hydraulic capacity ratios. *See* M1 Manual, at pp. 138-139; Study at p. 64-67. The ratios shown in Figure V-14 of the Study are the ratio of potential flow through each meter size compared to the flow through a 3/4-inch meter. For example, column 3 of Figure V-14 shows that the flow through a 2-inch meter is 4.57 times that of a 3/4-inch meter and therefore the meter capacity component (i.e., a portion of the cost of providing the distribution system) of the Service Charge is 4.57 times that of the 3/4-inch meter. Study at pp. 64-66. The meter ratios are also consistent with meter ratios adopted by the California Public Utilities Commission for private water companies.

The base-extra capacity cost of service analysis used in the Study resulted in four distinct service levels defined by the functions performed by facilities that are designed to provide the respective services—i.e., Base Day, Average Day, Maximum Day, and Maximum Hour. As stated in the Study, "[e]ach service has an "average flow" that is used as the division (i.e., "breakpoint") between each service, as shown in Figure V-1" of the Study. Study at p. 51. The steepness of the tiered residential Volume Charge rates is determined by the location of the "breakpoints" separating tiers, which determine the amount of water in each tier, and the rate per tier.

The locations of the breakpoints were based on flow data and design criteria. The breakpoints define operational ranges of demand based on actual Town customer water use. Specifically, the breakpoint locations correspond to average winter water use, average day water use, and maximum day water use of Town water customers. These three breakpoints create four tiers ranging from water use in the winter when peaking is negligible to water use during the peak hour of the year. *Id.* The use of four tiers is a common industry standard and frequently used by other Bay Area agencies.

The rate for each tier increases with each tier as a result of the cost allocations that determine the cost of service for each tier. The costs are allocated according to the flows that correspond to the facilities that are required to provide the flow. The rate in Tier 1 is low because peaking is negligible. Hence, the allocation of facilities is lowest in Tier 1 because there is very little need for the capacity that these facilities provide, which is determined by peak demands. Transmission mains and pump stations are designed for Maximum Day peaks and storage reservoirs and distribution mains are designed for Maximum Hour peaks. If customer demand never exceeded average winter water use (Base Day), these facilities would be much smaller. The Tier 1 rate represents what the cost is to meet the lowest level of demand. *Id.* at pp. 51-57.

The proposed rates are steeper than the current rates for two reasons. First, residential water use has become more efficient throughout the country and the Town is no exception, resulting in reduced revenues but not a corresponding reduction in costs of service. Today we find that per capita water use is lower. On average, water is used more efficiently, but peak demands have not declined as much. Second, irrigation demands still place significant peak demands on the facilities.

The non-residential customers are assigned a uniform rate and allocated their proportionate share of the costs based on their demand. The uniform rate is determined by dividing this customer class's proportionate share of the revenue requirement by the class's projected annual demand. *Id.* at 58-59.

D. STEP 5 — REVENUE STABILIZATION FACTORS

A substantial portion of the Town's costs to operate and maintain the water system are fixed, meaning the majority of costs remain the same regardless of how much water is used by customers. Over the last several years, the Town has experienced declines and changes in water demand resulting from the drought and state-mandated water use reductions, and, therefore, reductions in water revenues. HF&H studied the effects of the reduction in water use on projected revenues and developed a formula ("Revenue Stabilization Factors") that may be implemented to adjust the rates of the Volume Charge to ensure that there are sufficient revenues to fund the water utility's obligations in the event the Town has to implement mandatory conservation measures.

The Revenue Stabilization Factors would be applied to the Volume Charges rates and implemented during locally declared water shortages, state mandated reductions in the level of potable water usage, or other natural disaster or event that requires reductions in water usage. The City Council may implement the Revenue Stabilization Factors as necessary, depending on the level of potable water use cutbacks required, to ensure that the water utility recovers sufficient revenues to meet its expenditures and debt obligations.

The formula for the Revenue Stabilization Factors is comprised of a conservation and a variable cost component. The conservation component adjusts the Volume Charge rates to account for the reduction in water usage caused by conservation. The variable component adjusts the rates for the Volume Charge to account for the Town's specific water shortage conditions. The rates for the Volume Charge then in effect would be multiplied by the applicable Revenue Stabilization Factor to derive the Volume Charge rates to be in effect during the water shortage. An example of the formula for calculating the Revenue Stabilization Factor, the application of the formula to be applied to achieve a reduction in water usage of 20%, and the resulting Revenue Stabilization Factor to be applied to the Volume Charge rates is set forth below.

Revenue Stabilization Factor Formula
and Sample Calculation for 20% Reduction in Water Use

		Conservation Component		Variable Cost Component		
Formula	=	$\frac{1}{1-a}$	*	$\frac{b-(c*a)}{b}$		
20% Reduction	=	$\frac{1}{1-0.20}$	*	$\frac{0.73-(0.40*0.20)}{0.73}$		
Factor	=	1.25	*	0.89	=	**1.11**

a = Assumed percentage reduction in water usage = 20% (or 0.20)
b = Proportion of revenue that comes from the Volume Charge Rates = 73% (or 0.73)
c = Proportion of water utility expenses that are variable = 40% (or 0.40)

The table below demonstrates the proposed 2017 rates for the Volume Charge that would be in effect (with reductions in water usage in 10% increments) after applying the applicable Revenue Stabilization Factors using the formula above.

Below is an example of the calculation for the Revenue Stabilization Factor that would be applied to the proposed 2017 Tier 3 rate of the Volume Charge if the Town were required to reduce consumption again by 36%.

Sample Revenue Stabilization Factor Calculation
Assuming a 36% Conservation Requirement

	Conservation Component			Variable Component		
Formula	$= \frac{1}{1-0.36}$	*	$\frac{0.73-(0.40*0.36)}{0.73}$			
Factor	= 1.56	*	0.80	=	1.25	
Tier 3 Rate	= 1.25	*	$9.65	=	$12.06/HCF	

X. CONCLUSION

We hope this information has been helpful to you in navigating the rate setting process. As is evident from the cases discussed above, the courts have interpreted the substantive provisions of Article XIII D, section 6 and the import of Article X, section 2 on water rates differently and there may new cases that cannot be anticipated at this time that provide further clarification on rate setting. The Study has attempted to allocate the costs of providing water service in a manner that the court decisions have currently concluded are appropriate costs of service, and where they are in agreement on how to allocate those costs.

cc: Kathy Leroux, City Manager
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