

NOTICE OF APPROVAL – Notice is hereby given that at the April 22, 2024, City Council Meeting of the City of Jersey Village, Texas, the following ordinances, which may be viewed online at <http://www.jerseyvillagetx.com> and on the City’s Posting Bulletin Board were passed and approved:

ORDINANCE NO. 2024-10 - AN ORDINANCE ADOPTING A WATER CONSERVATION PLAN FOR THE CITY OF JERSEY VILLAGE; AMENDING THE CODE OF ORDINANCES OF THE CITY OF JERSEY VILLAGE, CHAPTER 70, UTILITIES, BY AMENDING ARTICLE VI., WATER CONSERVATION PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY AS PROVIDED BY SECTION 1-8 OF THE CODE; AND PROVIDING AN EFFECTIVE DATE.

ORDINANCE NO. 2024-11 - AN ORDINANCE ADOPTING A DROUGHT CONTINGENCY PLAN FOR THE CITY OF JERSEY VILLAGE; AMENDING THE CODE OF ORDINANCES OF THE CITY OF JERSEY VILLAGE, CHAPTER 70, UTILITIES, BY AMENDING ARTICLE V., DROUGHT CONTINGENCY PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY AS PROVIDED BY SECTION 1-8 OF THE CODE; AND PROVIDING AN EFFECTIVE DATE.

PASSED, APPROVED, AND ADOPTED the 22nd day of April 2024. /s/Michelle Mitcham, Mayor Pro tem

Attest: /s/ Lorri Coody, City Secretary, Jersey Village

Posted on the City’s Bulletin Board and on the Home Page of the City’s Website under “Latest News” for twenty days beginning on the 23rd day of April 2024 and remaining through and continuing through May 14, 2024.

/s/Lorri Coody, City Secretary, Jersey Village, Texas



ORDINANCE NO. 2024-10

AN ORDINANCE ADOPTING A WATER CONSERVATION PLAN FOR THE CITY OF JERSEY VILLAGE; AMENDING THE CODE OF ORDINANCES OF THE CITY OF JERSEY VILLAGE, CHAPTER 70, UTILITIES, BY AMENDING ARTICLE VI., WATER CONSERVATION PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY AS PROVIDED BY SECTION 1-8 OF THE CODE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Jersey Village recognizes that the amount of water available to its utility customers is limited and subject to depletion during periods of extended drought; and

WHEREAS, in the best interest of its utility customers, City Council is authorized to adopt ordinances it deems are necessary and expedient to preserve and conserve its water resources to prepare for drought; and

WHEREAS, City Council desires to comply with the rules of the Texas Water Development Board, and adopt a Water Conservation Plan; NOW THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JERSEY VILLAGE, TEXAS THAT:

Section 1. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. The Water Conservation Plan, attached hereto as “Exhibit A” is hereby adopted as the official policy of the City of Jersey Village.

Section 3. The Code of Ordinances of the City of Jersey Village is amended by deleting from Chapter 70, Article VI, Section 70-201 the language shown below in struckthrough (deleted) and by adding thereto the language shown below as underscored and boldfaced (**added**), with the new Section 70-201 to read as follows:

Sec. 70-201. Adoption of Water Conservation Plan.

The City of Jersey Village Water Conservation Plan, dated April ~~2019~~ 2024, is hereby adopted for the city and is incorporated by reference herein. A true and correct copy of the City of Jersey Village Water Conservation Plan shall be filed and maintained in the office of the city secretary and available for public viewing during normal business hours.

Section 4. Severability. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Jersey Village, declares that it would have passed each and every part of the

same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 5. **Penalty.** Any person who shall willfully, intentionally, or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 6. **Effective Date.**

This ordinance shall be in full force and effect from and after its passage.

PASSED, APPROVED, AND ADOPTED this 22nd day of April 2024.

s/Michelle Mitcham, Mayor Pro tem

ATTEST:

s/Lorri Coody, City Secretary



CITY OF JERSEY VILLAGE, TEXAS
WATER CONSERVATION PLAN



APRIL, 2024 - 2029

Name of Water Supplier: City of Jersey Village

Address: 16327 Lakeview Dr., Jersey Village, TX 77040

Telephone Number: 713-466-2100 Fax: (713) 466-2177

Water Right No.(s): N/A

Regional Water Planning Group: Region H

Water Conservation Coordinator (or person responsible for implementing conservation program): Austin Bless, City Manager

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Introduction

In June 2000, the City of Jersey Village entered into a water supply contract with the City of Houston for distribution of water for domestic and commercial purposes. Per the agreement, the City of Houston arranged to include Jersey Village in its Ground Water Reduction Plan in accordance with the rules and regulations of the Harris-Galveston Coastal Subsidence District. Jersey Village also implemented a Drought Contingency Plan via Ordinance 2000-25.

Jersey Village's water and wastewater systems are City-owned, serving residential and commercial sites across approximately 3.3 square miles. To combat drought and conserve resources, Jersey Village aims to enact a Water Conservation Plan alongside its Drought Contingency Plan, targeting reduced water consumption and minimized water loss over the coming years.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. *Population and Service Area Data*

- Service area size (in square miles): 3.36
(Copy of service-area map attached)
- Current population of service area: 7,959
- Current population served for:
 - a. Water 7,959
 - b. Wastewater 7,959

Population served for previous five years:

Projected population for service area:

<i>Year</i>	<i>Population</i>
2023	7959
2022	7959
2021	7950
2020	7921
2019	7921

<i>Year</i>	<i>Population</i>
2030	8,028
2040	8,179
2050	8,344
2060	8,525
2070	8,274

- Population information obtained from the United States Census Bureau. Projected population size obtained from the City’s Capital Improvement Plan and Impact Fee Study 2023 Update.
- The City anticipates growth in the form of new development and redevelopment in the area south of Highway 290. This area is partially served by the City in the form of water, wastewater, and stormwater. Growth and development projections are formulated based on land use type in areas undeveloped or anticipated for redevelopment.

B. Customer Data

1. Quantified 5-year and 10-year goals for water savings:

	<i>Historic 5-year Average</i>	<i>Baseline</i>	<i>5-year goal for year 2029</i>	<i>10-year goal for year 2034</i>
Total GPCD	154	154	152	150
Residential GPCD	135	135	134	134
Water Loss GPCD	19	19	23	23
Water Loss Percentage	13%	13%	13%	13%

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

2. Current number of active connections. Check whether multi-family service is counted as

Residential or Commercial

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	<i>Totals</i>
Residential	3022		3022
Single-Family	2267		2267
Multi-Family	755		755
Commercial	262		262
Industrial/Mining			
Institutional	63		63
Agriculture	0		0
Other/Wholesale			

3. List the number of new connections per year for most recent three years.

Year	2020	2021	2022
<i>Treated Water Users</i>			
Residential			
Single-Family		1	2
Multi-Family			
Commercial	5	7	6
Industrial/Mining	0	0	0
Institutional/Public			
Agriculture/Irrigation			
Other/Wholesale	0	0	0

4. List of annual water use for the five highest volume customers.

<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
Trails at Corinthian Creek	18728	Treated
Trails at Rock Creek	13285	Treated
Prologis	9811	Treated
Kessler Jersey Village	8692	Treated
Kessler Jersey Village	5733	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is diverted or treated water.

<i>Year</i>	2023	2022	2021	2020	2019
<i>Month</i>					
January	24533	28708	24454	25432	19726
February	22122	26793	28686	24467	22181
March	23658	21223	20061	24678	20823
April	28854	32092	27719	27754	28633
May	28945	37238	28848	32037	32875
June	39917	46574	29679	41592	36318
July	43775	58124	25573	41265	38549
August	60233	48654	36014	42404	49301
September	56348	34506	35002	42913	40360
October	34937	47723	29953	37161	38254
November	32018	26566	24906	33484	22820
December	21786	22429	25041	21307	25938
Totals	417126	430630	335936	394494	375778

- Meters are located at the point where purchased water and pumped water enters the water treatment plant. Utility is a blend of both groundwater and purchased surface water from the City of Houston.

Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2023	2022	2021	2020	2019
<i>Account Types</i>					
Residential					
Single-Family	184482	184589	138272	170496	160433
Multi-Family	58258	58291	43665	53841	50663
Commercial	105592	102222	100335	107469	113351
Industrial/Mining	0	0	0	0	0
Institutional/Public	21860	34235	22568	15757	11310
Agriculture/Irrigation	46934	51293	31096	46928	40017
Other/Wholesale	0	0	0	0	0

2. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2023	133,274,000	24
2022	85,458,000	17
2021	54,193,000	14
2020	56,409,400	13
2019	91,858,000	20

B. Projected Water Demands

1. The projected water and wastewater service unit demands are projected at 250 GPD (gallons per day) and 200 GPD respectively. These projected water and wastewater demands correlate to the City of Houston Impact Fee Service Unit Equivalent Table dated August 26, 2019. The Service Unit Equivalents are calculated based on the type of development and approximate total number of service units necessary for the new development. The table below presents the water and wastewater SUs for the City's future water and wastewater systems.

<i>Systems</i>	<i>2028 Projected Demands (gpd)</i>	<i>2028 Projected SUs</i>	<i>2033 Projected Demands (gpd)</i>	<i>2033 Projected SUs</i>	<i>Total 10- Year Demands (gpd)</i>	<i>Total 10- Year SUs</i>
Water	272,628	1,091	797,582	3,190	1,070,210	4,281
Wastewater	218,102	1,091	638,065	3,190	856,167	4,281

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	City of Houston Purchase Contract	1.5 MGD
Groundwater	City-owned wells (2)	1.470 MGD
Other	Harris County MUD 168	As Needed/ Emergency Basis

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD): 2.220 MGD
2. Storage capacity (MGD):
 - a. Elevated 750,000 MGD
 - b. Ground 1.720 MGD
3. If surface water, do you recycle filter backwash to the head of the plant?

Yes No If yes, approximate amount (MGD): N/A

 - o Not applicable, utility system is groundwater under the influence of purchased surface water provided through a contract with the City of Houston.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) (MGD):
 - o 800,000 MGD at Castlebridge WWTP (owned and maintained by the City)

- 812,600 MGD at White Oak Bayou WWTP (City is 40.63% owner of a total 2.0 MGD wwtp).
- 2. Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.
- 3. Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.
- The effluent point of discharge is located approximately 1,000 feet west of Beltway 8, into White Oak Bayou.
- White Oak Bayou WWTP NPDES permit number is TCEQ - TPDES WQ0011538001, Issued 8/30/2017, Expires 4/3/2028.
- Castlebridge WWTP permit number is TCEQ - TPDES WQ0012681001 Issued 10/17/2017, Expires 1/13/2027.

B. Wastewater Data for Service Area

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2023	2022	2021	2020	2019
<i>Month</i>					
January	4407	3700	3737	4773	5197
February	6330	3449	2692	3572	6584
March	4407	3615	3234	3662	3730
April	3468	3074	3310	3819	4242
May	4350	3124	4659	3875	5253
June	3920	2925	4204	4922	4202
July	3893	2938	4028	4105	3982
August	3807	3660	3772	3504	4680
September	4544	3719	4022	4533	4470
October	4084	3475	4202	3586	6130
November	4569	3660	3678	3458	4760
December	4996	3632	3883	3674	6466
Totals	52775	40971	45421	47483	59696

Water Conservation

The City of Jersey Village is committed to implementing proactive water conservation measures to safeguard its water resources and enhance long-term sustainability. By fostering a culture of conservation and collaboration, the City aims to achieve its conservation goals while ensuring a reliable and resilient water supply for its utility customers.

This comprehensive water conservation plan reflects the City's dedication to responsible stewardship of its water resources.

A. *Record Management System*

In compliance with the State of Texas retention rate for utility billing records, the City of Jersey Village has implemented a comprehensive record management system tailored to manage water sales and usage data effectively. The system is designed to classify water usage into detailed categories, including various sectors such as residential (single and multi-family) and commercial, in accordance with the most precise level of water use data available.

Components of the Record Management System:

- The record management system categorizes water sales and usage data into specific sectors to facilitate accurate tracking and analysis.
- The system adheres to the retention rates mandated by the State of Texas for utility billing records, ensuring compliance with legal requirements and best practices.
- The system captures detailed information on water consumption patterns, allowing for in-depth analysis and informed decision-making regarding water conservation initiatives.
- The system also captures water usage data from commercial establishments, enabling the identification of trends and opportunities for conservation efforts within the commercial sector.
- The system enables the generation of comprehensive reports and analyses, providing valuable insights into water consumption trends and patterns across different sectors.

The City continuously enhances its record management system to align with evolving industry standards and regulatory requirements. Through ongoing monitoring and evaluation, the City strives to optimize water conservation efforts and promote sustainable water usage practices.

B. *Specific, Quantified 5 & 10-Year Targets*

The City is committed to implementing strategic water-saving initiatives. Recognizing the importance of responsible water management, we have established specific quantified targets aimed at reducing water consumption and minimizing water loss within our community.

Reduction in Total Gallons Used per Person per Day:

- Our objective is to achieve a 1.6% decrease in total gallons used per person per day over a 5-year period.
- Looking ahead, our long-term goal is to achieve a 3.2% decrease in total gallons used per person per day over a ten-year period.

- Over the next decade, our conservation program aims to educate and empower residents to adopt water-saving practices and utilize efficient water management techniques.

Peak Demand Reduction:

- We aim to target a 3% reduction in peak water demand over the next five years. By strategically managing peak demand periods, we can optimize our water distribution system and minimize strain on our infrastructure during periods of high usage.

Water Loss Program Goals:

- In alignment with our water consumption reduction targets, we have set goals for our water loss programs to enhance efficiency and minimize wastage within our distribution network. Through proactive leak detection and infrastructure maintenance initiatives, we aim to reduce water loss by 10% over the next five years, ensuring the optimal utilization of our water resources.

C. Measuring and Accounting for Diversions

The City utilizes Neptune water meters which typically have an accuracy rating of plus or minus 1 to 2 percent under normal operating conditions. This means that the meter's measurements can deviate by up to 1 to 2 percent from the actual flow rate of water passing through it. However, accuracy may vary depending on factors such as installation, maintenance, and calibration.

The City employs third-party testing services to conduct accuracy bench testing. If a meter fails to meet the standards outlined by the American Water Works Association, it will be replaced in accordance with City policy.

D. Universal Metering

The City implements universal water metering across all utility customers, utilizing Neptune meters to accurately monitor water usage. This includes accounts utilized by the municipality for city facilities and public use, ensuring comprehensive tracking of water consumption. From 2018-2019, all meters underwent replacement as part of a systematic meter replacement program. If a meter is discovered to be inaccurate as per American Water Works Association standards, it undergoes testing and is replaced in accordance with City policy. Additionally, any non-functioning components of the meter are promptly replaced by utility personnel to maintain optimal meter functionality and precise water usage measurement.

E. Measures to Determine and Control Water Loss

The Public Works Department employs the following strategies to detect and control water loss:

Regular Inspection during Meter Readings and Maintenance

- Utility employees conduct thorough inspections for leaks while reading meters and performing routine maintenance tasks throughout the City.
- Inspections are carried out systematically to ensure comprehensive coverage of all areas prone to water loss.

Prompt Response to Major Leaks

- Major leaks are swiftly identified and reported by City employees or utility customers.
- The City strives to ensure that major leaks are repaired expeditiously to minimize water loss and prevent potential damage to infrastructure.

Utilization of Advanced Leak Detection Technology

- Advanced leak detection tools and methods, such as Ground Penetrating Radar, are employed in areas with a higher risk of water loss, enhancing the accuracy and efficiency of leak detection efforts.
- The City allocates annual funds within the Capital Improvement Plan specifically for Ground Penetrating Radar (GPR) usage. GPR employs electromagnetic waves to detect alterations in subsurface materials, aiding in the identification of buried leaks.

Focus on High-Risk Areas

- Utility personnel focus on target areas with porous soils and historical records of water loss incidents.
- Special attention is given to vulnerable locations prone to leaks, ensuring proactive detection and prevention measures are in place.

Regular Training and Awareness Programs

- The Department of Public Works conducts on-going training programs for utility employees to enhance their skills in leak detection and water loss control.
- Awareness campaigns are conducted among utility customers to encourage timely reporting of leaks through the City service order mobile application.

Continuous Monitoring and Evaluation

- Regular monitoring of water distribution systems and metering data is conducted to identify trends and patterns indicative of potential water loss.
- Personnel conduct periodic evaluations of the effectiveness of water loss control measures, with adjustments made as necessary to optimize outcomes and minimize wastage.

F. Continuing Public Education & Information

Over the next five years, the City will embark on an extensive community education campaign to promote water conservation awareness and encourage behavioral changes among residents. Educational programs, workshops, and outreach events will be organized to impart knowledge about water-saving techniques and the importance of responsible water usage.

Promotion of "Water My Yard" Program

- Our primary focus is to engage the public through educational initiatives, with a particular emphasis on promoting the "Water My Yard" program. Our goal is to increase subscribers to the program by 15% over the next 5 years, encouraging utility customers to adopt water-efficient landscaping practices and optimize outdoor water usage.

Distribution of Conservation Kits

- We aim to collaborate with the Harris-Galveston Subsidence District to provide conservation kits to residents, containing water-saving devices and educational materials. These kits will empower residents to implement simple yet effective measures to conserve water in their homes and gardens.

Public Outreach and Education

- To raise awareness about water conservation practices, we will conduct workshops, seminars, and educational campaigns throughout the community. Utilizing social media platforms, newsletters, and community events, we will disseminate valuable information and engage residents in meaningful conversations about water conservation.

Community Partnership

- We recognize the importance of partnerships in driving collective action towards water conservation goals. Therefore, we aim to foster collaborations with local businesses, schools, and civic organizations to amplify our outreach efforts and reach a wider audience. Encouraging participation in community-based conservation projects will empower utility customers to contribute to water conservation efforts on a broader scale.

G. Non-Promotional Water Rate Structure

The City conducted a utility rate study in June 2023 to ensure that the existing rate structure remains sufficient to support the needs of the utility fund and the City over the coming years.

The study was tailored to coincide with the City's current 10-year Capital Improvement Plan and implemented adjustments to the rate structure. The goal of the adjusted rate structure is to reflect the costs associated with providing essential services and maintaining the infrastructure, while mitigating excessive water usage.

H. Enforcement Procedure and Plan Adoption

Enforcement mechanisms will be established through the passage of relevant City Ordinances. Non-compliance with the mandatory provisions outlined in the City's Drought Contingency Plan may lead to penalties and/or temporary interruption of water service. The City Manager holds authority to enforce these provisions and may suspend water service in cases of repeated violations. Penalties must be settled prior to the restoration of water service. Any violations observed by City personnel will be promptly reported to the City Manager. The initiation of the program will commence with the adoption of the Water Conservation Plan by Resolution through the City of Jersey Village City Council.

I. Coordination with the Regional Water Planning Group(s)

The City of Jersey Village will engage in coordination efforts with the Texas Water Development Board Region H Planning Group to maintain alignment with regional water plans. This coordination involves regular communication and collaboration between City officials and the planning group to ensure consistency in water management strategies. By actively participating in discussions, sharing data, and adhering to the guidelines established by the Texas Water Development Board, the City aims to contribute to the sustainable and efficient utilization of water resources while addressing the needs of the local community within the broader regional context.

J. Plan Review and Update

The City of Jersey Village reviews and updates its water conservation plan every five years in alignment with the Texas Water Development Board Region H Planning Group. This coordinated effort ensures that the City's water conservation strategies remain current and responsive to evolving regional needs and priorities.

VI. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS

A. Leak Detection and Repair

The City has successfully executed multiple significant water line replacement projects spanning a decade, addressing areas with frequent main breaks attributed to line degradation and ground shifting. Approximately 6.6 miles of water distribution lines have been replaced, mitigating ongoing issues. To further enhance the leak detection and repair efforts, the City is developing a comprehensive 10-year street replacement schedule, ensuring that all identified streets receive new water lines.

In addition to planning for water line replacement, the City will implement the following strategies to enhance the detection and repair of leaks:

- Collect data on water flow rates, pressure, and other relevant parameters.
- Utilize SCADA (Supervisory Control and Data Acquisition) systems or IoT (Internet of Things) devices for real-time monitoring.
- Develop algorithms to analyze data and detect anomalies such as sudden drops in pressure or unexpected changes in flow rates.
- Implement machine learning algorithms to identify patterns associated with leaks and abnormal water usage.
- Utilize Geographic Information Systems (GIS) to map the water distribution network and identify vulnerable areas prone to leaks.
- Overlay data on topography, soil composition, and infrastructure age to pinpoint potential leak locations.
- Explore the use of remote sensing technologies such as satellite imagery and aerial surveys to detect water leaks and assess the condition of pipelines.
- Integrate utility customer water usage data to correlate changes in consumption patterns with potential leaks or anomalies in the distribution system.
- Provide utility customers with tools and resources to report leaks and monitor their own water usage.

- Implement predictive maintenance strategies based on historical data and predictive analytics to proactively identify and address potential issues before they escalate into major leaks.
- Establish protocols for responding to leak detection alerts promptly.
- Prioritize repairs based on the severity of the leak, potential impact on water loss, and criticality of the affected infrastructure.
- Develop methodologies for quantifying water loss throughout the distribution system.
- Implement water balance calculations to account for water input, usage, and losses, including leakage and unaccounted for usage.
- Track the effectiveness of the leak detection program through performance metrics such as leak detection rate, repair response time, and reduction in water loss.
- Generate regular reports and dashboards to communicate progress and outcomes to stakeholders, including regulatory agencies and the public.
- Continuously evaluate and refine the leak detection program based on feedback, lessons learned, and advancements in technology and best practices.
- Foster a culture of collaboration and innovation among stakeholders to drive ongoing improvements in water management and conservation efforts.

B. Contract Requirements

In June of 2000, the City of Jersey Village entered into a water supply contract with the City of Houston, establishing provisions for the distribution and utilization of water for domestic and commercial purposes. Before this agreement, the City of Jersey Village sourced water from wells within Regulatory Area Three of the Harris-Galveston Coastal Subsidence District. This district allowed collaborative efforts for a regional groundwater reduction plan.

As part of the contract, the City of Houston included Jersey Village in its Groundwater Reduction Plan, complying with the regulations of the Harris-Galveston Coastal Subsidence District. Notably, when the contract comes up for renewal in 2040, the City of Jersey Village commits to adhering to any water conservation measures specified within the agreement.

In response to this collaboration, the City of Jersey Village City Council ratified Ordinance 2000-25 in August of 2000, endorsing a Drought Contingency Plan as a proactive measure.

VII. ADDITIONAL CONSERVATION STRATEGIES

1. Adoption of ordinances, plumbing codes, and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;
 - The City of Jersey Village has adopted water-saving plumbing codes for both new construction projects and the replacement of plumbing in existing structures. These codes, recommended by the Texas Water Development Board, advocate for readily available technologies that do not entail additional costs compared to conventional fixtures. Entities have the flexibility to tailor water-conserving plumbing codes to their specific needs, in addition to adhering to the 2018 International Plumbing Codes and 2018 International Residential Codes, which are already in place.

- The City will encourage all new construction or substantial modification to use water saving plumbing fixtures, e.g. low flow toilets, shower heads, and faucets. Owners of existing structures will be encouraged to retrofit with water saving devices.
2. A program for reuse and/or recycling of wastewater and/or graywater;
 - The City of Jersey Village is actively engaged in implementing a water reuse program. Reclaimed water finds suitable applications for various domestic, industrial, and irrigation needs where direct human contact is limited. Specifically, the City has made modifications to utilize reclaimed water for irrigation purposes on its golf course. The quality of the city's effluent water will undergo testing to assess the necessity for additional treatment. The direct use of reclaimed water falls under regulation by the Texas Commission on Environmental Quality (TCEQ) under Chapter 210 of the Texas Administrative Code and Safe Drinking Water Act Standards. Any use of reclaimed water requires approval from the TCEQ, ensuring compliance with all design guidelines for reclaimed water systems. As part of this initiative, the city has installed new greywater lines for the distribution of reclaimed water. Through these measures, the City aims to reduce the demand on its distribution system for irrigation purposes, potentially saving an estimated one million gallons of water.
 3. A program for pressure control and/or reduction in the distribution system and/or for customer connections;
 - Conduct a comprehensive assessment of the distribution system to identify areas with high pressure and potential for pressure control or reduction.
 - Gather data on pressure levels across different sections of the distribution network using pressure gauges and monitoring devices.
 - Analyze pressure data to determine areas where pressure exceeds recommended levels and where pressure reduction measures are necessary.
 - Identify strategic locations within the distribution system where pressure control devices such as pressure reducing valves (PRVs) can be installed.
 - Install PRVs at identified control points to regulate pressure and reduce it to optimal levels for customer connections.
 - Calibrate newly installed PRVs and conduct thorough testing to ensure they effectively control pressure within desired parameters.
 - Implement a routine monitoring program to continuously monitor pressure levels at customer connections and adjust PRVs as needed to maintain optimal pressure.
 - Educate customers about the importance of pressure control and reduction in the distribution system, as well as the potential benefits for their plumbing systems.
 - Implement leak detection programs to identify and repair leaks in the distribution system promptly, as leaks can contribute to high pressure and system inefficiencies.
 - Periodically review the pressure control and reduction plan to assess its effectiveness and identify opportunities for further optimization or expansion to additional areas of the distribution network.
 4. A program and/or ordinance(s) for landscape water management;

- Implementing conservation practices in park irrigation and exercising careful water usage in the operation and maintenance of park facilities can effectively decrease water demands. The City of Jersey Village has developed a conservation plan tailored to each of its parks. This comprehensive plan includes a written procedure for the efficient operation and maintenance of park irrigation systems. The Parks and Recreation Department will oversee the implementation of a watering schedule designed to use only the necessary amount of water to sustain the health of the turf and landscaping appropriate for each park's use. Additionally, the plan mandates the replacement of all manually controlled or quick-couple irrigation systems with automatic irrigation systems and controllers.
5. A method for monitoring the effectiveness and efficiency of the water conservation plan;
- Gather data on water consumption, water loss, and other relevant metrics throughout the implementation of the water conservation plan.
 - Establish baseline measurements for key indicators such as average water consumption per capita, water loss rates, and overall water usage.
 - Introduce and execute various water conservation strategies outlined in the plan, such as public education campaigns, infrastructure upgrades, and policy changes.
 - Continuously monitor water consumption patterns, water loss rates, and other relevant metrics on a regular basis, such as monthly or quarterly.
 - Compare current data with baseline measurements to evaluate the effectiveness of implemented conservation measures.
 - Identify areas where the plan is not achieving desired results and make necessary adjustments or improvements to enhance effectiveness.
 - Seek feedback from stakeholders, residents, and relevant departments to gauge satisfaction with conservation efforts and identify areas for improvement.
 - Conduct periodic reviews of the water conservation plan to assess long-term effectiveness and identify opportunities for further optimization.
 - Prepare regular reports summarizing findings and progress towards conservation goals to stakeholders, City officials, and the public.
 - Use monitoring data and feedback to inform future iterations of the water conservation plan, ensuring ongoing improvement in efficiency and effectiveness over time.

End of document.

ORDINANCE NO. 2024-11

AN ORDINANCE ADOPTING A DROUGHT CONTINGENCY PLAN FOR THE CITY OF JERSEY VILLAGE; AMENDING THE CODE OF ORDINANCES OF THE CITY OF JERSEY VILLAGE, CHAPTER 70, UTILITIES, BY AMENDING ARTICLE V., DROUGHT CONTINGENCY PLAN; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY AS PROVIDED BY SECTION 1-8 OF THE CODE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Jersey Village recognizes the evolving needs of the city and the importance of proactive water management; and

WHEREAS, the City seeks to update the existing Drought Contingency plan; and

WHEREAS, City Council desires to ensure the drought contingency plan remains relevant and effective in addressing the city’s current and future water management needs while also promoting community involvement and understanding; **NOW THEREFORE**,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JERSEY VILLAGE, TEXAS THAT:

Section 1. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. The Drought Contingency Plan, attached hereto as “Exhibit A” is hereby adopted as the official policy of the City of Jersey Village.

Section 3. The Code of Ordinances of the City of Jersey Village is amended by deleting from Chapter 70, Article VI, Section 70-161 through Section 70-171 the language shown below in struckthrough (deleted) and by adding thereto the language shown below as underscored and boldfaced (**added**), with the new Section 70-161 through Section 70-171 to read as follows:

Sec. 70-162. – Public Involvement.

Opportunity for the public to provide input into the preparation of the Plan was provided by the City of Jersey Village by means of public meeting. Specifically a public hearing was held on ~~Monday, April 17, 2000~~ **Monday, April 22, 2024**, to receive comment and input from the public. **Information seeking public involvement was sent out in the Jersey Village Star March 2024 edition, in email blasts to residents and utility billing customers on March 3, 2024 and March 27, 2024, and posted on the city website on March 1, 2024. Social media posts were made several times in March 2024 seeking feedback as well.**

Sec. 70-163. – Public Education **and Notification Of Plan Initiation**

- a) The City of Jersey Village will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of a notice to residents, monthly newsletter, and online publication.

- b) On a monthly basis the ~~Jersey Village~~ **city** publishes a newsletter called, the “Jersey Village Star.” Outlines of the plan shall be provided as ~~an insert to~~ **in** this publication, **at least annually**. ~~Residents shall be notified of the initiation of the plan and the initiation or termination of drought response stages by publication in the “Jersey Village Star” and/or by a door hanger or leaflet delivered to each single family residence and all commercial and multi-family facilities.~~
- c) **Each water customer shall be notified of the initiation of the plan by email, sms messages, letters or phone calls using the contact information the city has on file for each property in the city utility billing system.**

Sec. 70-164. – Coordination with Regional Water Planning Groups.

The service area of the city is located within the regional water district H and **the** city has provided a copy of this plan to district H.

Sec. 70-168. – Triggering criteria for initiation and termination of drought response stages.

Phase 1—Mild water shortage conditions.

- a. *Requirements for initiation.* Customers shall conserve water and adhere to the prescribed restrictions on certain water uses, defined in section 70-167, when:
1. Water production reaches 90 percent of the safe production capacity of the city **for three consecutive days**.
 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 1 of the Drought Contingency Plan.
 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
 4. Total daily water demand equals or exceeds 90 percent of the production capacity for three consecutive days or 95 percent of the production capacity on a single day.
- b. *Requirements for termination.* Phase 1 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days.

(2) *Phase 2—Moderate water shortage conditions.*

- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain nonessential water uses provided in section 70-167 when:
1. Water production capacity reaches 95 percent of the safe water production capacity of the city **for two consecutive days**.
 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 2 of the Drought Contingency Plan.
 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
 4. Total daily water demand equals or exceeds 95 percent of the production capacity for three consecutive days or 100 percent of the production capacity on a single day.

- b. *Requirements for termination.* Phase 2 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three consecutive days. Upon termination of Phase 2, Phase 1 becomes operative.
- (3) *Phase 3—Severe water shortage conditions.*
- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain nonessential water uses for Phase 3 of this plan when:
 1. Water production reaches 100 percent of the safe water production capacity of the city.
 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 3 of the Drought Contingency Plan.
 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
 4. Total daily water demand equals or exceeds 100 percent of the production capacity for three consecutive days or 105 percent of the production capacity on a single day.
 - b. *Requirements for termination.* Phase 3 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three consecutive days. Upon termination of Phase 3, Phase 2 becomes operative.
- (4) *Phase 4—Emergency water shortage conditions.*
- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions for Phase 4 of this plan when the city manager, or his/her designee, determines that a water supply emergency exists based on:
 1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
 2. Natural or man-made contamination of the water supply source(s).
 - b. *Requirements for termination.* Phase 4 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days. Upon termination of Phase 4, Phase 3 becomes operative.

Sec. 70-169. – Drought response phases.

The city manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in section 70-167 of the plan, shall determine that a mild, moderate, severe, or emergency condition exists and shall implement the following actions upon publication of notice in a newspaper of general circulation:

- (1) *Phase 1—Mild water shortage conditions.*
 - a. *Goal.* Achieve a ~~mandatory~~ **voluntary** reduction in water production below the 90 percent production capacity of the city.
 - b. *Supply management measures.* The city shall discontinue the monthly flushing of water mains, unless in response to a customer water quality complaint. Irrigation of all public landscaping areas shall comply with the odd/even address requirements that the public are being asked to meet.
 - c. ~~*Mandatory water use restrictions.*~~ ***Voluntary water use restrictions.***
 1. Water customers shall limit the irrigation of landscaped areas to Mondays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6

or 8), and Tuesdays and Fridays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 9:00 a.m. and 7:00 p.m. to midnight on designated watering days.

2. All operations of the city shall adhere to water use restrictions prescribed for Phase 1 of the plan.
- (2) *Phase 2— Moderate water shortage conditions.*
- a. *Goal.* Achieve a five percent reduction in water production.
 - b. *Supply management measures.* The city shall discontinue the monthly flushing of water mains, unless in response to a customer water quality complaint. Irrigation of all public landscaping areas shall comply with the odd/even address requirements that the public are being asked to meet.
 - c. ~~*Water use restrictions.*~~ ***Mandatory water use restrictions.*** Under threat of penalty for violation, the following water use restrictions shall apply to all persons:
 1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to **Mondays and Thursdays** for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and **Tuesdays and** Fridays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 9:00 a.m. and between 7:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five gallons or less, or drip irrigation system.
 2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized.
 3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight.
 4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
 5. Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the city.
 6. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on ~~designated watering days~~ **Mondays, Wednesdays, and Fridays** between the hours 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight.

However, if the golf course utilizes a water source other than that provided by the city, the facility shall not be subject to these regulations.

7. The following uses of water are defined as nonessential and are prohibited:
 - (a) Wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
 - (b) Use of water to wash down buildings or structures for purposes other than immediate fire protection;
 - (c) Use of water for dust control;
 - (d) Flushing gutters or permitting water to run or accumulate in any gutter or street; and
 - (e) Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

(3) *Phase 3—Severe water shortage conditions.*

- a. *Goal.* Achieve a ten percent reduction in water production.
- b. *Supply management measures.* All use of outdoor watering shall be prohibited by city personnel.
- c. ~~*Water use restrictions.*~~ ***Mandatory water use restrictions.*** All requirements of Phase 2 shall remain in effect during Phase 3 except:
 1. Irrigation of landscaped areas shall be limited to ~~designated watering days~~ **Mondays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Fridays for customers with a street address ending in an odd number (1, 3, 5, 7 or 9)** between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, only. The use of hose-end sprinklers or permanently installed automatic sprinkler system is prohibited at all times. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized.
 2. The watering of golf course ~~tees~~ **fairways** is prohibited unless the golf course utilizes a water source other than that provided by the city.
 3. The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

(4) *Phase 4—Critical water shortage conditions.*

- a. *Goal.* Achieve a 15 percent reduction in water production.
- b. *Supply management measures.* All use of outdoor watering shall be prohibited by city personnel.
- c. ~~*Water use restrictions.*~~ ***Mandatory water use restrictions.*** All requirements of Phase 2 and 3 shall remain in effect during Phase 4 except:
 1. Irrigation of landscaped areas is absolutely prohibited.
 2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.
 3. The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
 4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

5. No applications for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

6. The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the city.

Section 4. Severability. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Jersey Village, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 5. Penalty. Any person who shall willfully, intentionally, or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 6. Effective Date.

This ordinance shall be in full force and effect from and after its passage.

PASSED, APPROVED, AND ADOPTED this 22nd day of April 2024.

s/Michelle Mitcham, Mayor Pro tem

ATTEST:

s/Lorri Coody, City Secretary



CITY OF JERSEY VILLAGE, TEXAS
DROUGHT CONTINGENCY PLAN



FIVE YEAR UPDATE
APRIL, 2024 - 2029

Name: City of Jersey Village - Main Potable Water System

Address: 16327 Lakeview Drive, Jersey Village, TX 77040

Telephone Number: (713) 466-2100 Fax: (713) 466-2177

Water Right No.(s): N/A

Regional Water Planning Group: Region H

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Sec. 70-161. - Declaration of Policy, Purpose, and Intent

- a) In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Jersey Village hereby adopts the following regulations and restrictions on the delivery and consumption of water.
- b) Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in section 70-171.
- c) This drought contingency plan shall supercede and previous ordinance that the city has adopted.

Sec. 70-162. - Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by the City of Jersey Village by means of public meeting. Specifically a public hearing was held on ~~Monday, April 17, 2000~~ **Monday, April 22, 2024**, to receive comment and input from the public. **Information seeking public involvement was sent out in the Jersey Village Star March 2024 edition, in email blasts to residents and utility billing customers on March 3, 2024 and March 27, 2024, and posted on the city website on March 1, 2024. Social media posts were made several times in March 2024 seeking feedback as well.**

Sec. 70-163. - Public Education and Notification Of Plan Initiation

- a) The City of Jersey Village will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of a notice to residents, monthly newsletter, and online publication.
- b) On a monthly basis the ~~Jersey Village~~ **city** publishes a newsletter called, the “Jersey Village Star.” Outlines of the plan shall be provided as ~~an insert to~~ **in** this publication, **at least annually**. ~~Residents shall be notified of the initiation of the plan and the initiation or termination of drought response stages by publication in the “Jersey Village Star” and/or by a door hanger or leaflet delivered to each single family residence and all commercial and multi-family facilities.~~
- c) **Each water customer shall be notified of the initiation of the plan by email, sms messages, letters or phone calls using the contact information the city has on file for each property in the city utility billing system.**

Sec. 70-164. - Coordination with Regional Water Planning Groups

The service area of the city is located within the regional water district H and the city has provided a copy of this plan to district H.

Sec. 70-165. - Authorization

- a) The city manager, or his/her designee is hereby authorized and directed to implement the applicable provisions of this plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The city manager or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

- b) The director of public works shall be required to submit a memo to the city manager that approves the safe water production level for the city. This memo shall be filed on an annual basis and/or when the safe water production level changes or is modified by equipment failures.

Sec. 70-166. - Application

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the city. The terms “person” and “customer” as used in the plan include individuals, corporations, partnerships, associations, and all other legal entities.

Sec. 70-167. - Definitions

For the purposes of this plan, the following definitions shall apply:

Aesthetic water use: Water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: Water use which is integral to the operations of commercial and nonprofit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Customer: Any person, company, or organization using water supplied by the city

Domestic water use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Even number address: Street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

Industrial water use: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- (a) Irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- (c) Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (d) Use of water to wash down buildings or structures for purposes other than immediate fire protection; flushing gutters or permitting water to run or accumulate in any gutter or street; use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools; use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life; failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and use of water from hydrants for construction purposes or any other purposes other than firefighting.

Odd numbered address: Street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

Sec. 70-168. - Triggering criteria for initiation and termination of drought response stages.

- (a) The city manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the plan.
- (b) The triggering criteria described below are based on total water production capacity and system pressure.

(1) *Phase 1—Mild water shortage conditions.*

a. *Requirements for initiation.* Customers shall conserve water and adhere to the prescribed restrictions on certain water uses, defined in section 70-167, when:

- 1. Water production reaches 90 percent of the safe production capacity of the city **for three consecutive days.**
- 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 1 of the Drought Contingency Plan.
- 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
- 4. Total daily water demand equals or exceeds 90 percent of the production capacity for three consecutive days or 95 percent of the production capacity on a single day.

- b. *Requirements for termination.* Phase 1 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days.
- (2) *Phase 2—Moderate water shortage conditions.*
- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain nonessential water uses provided in section 70-167 when:
 1. Water production capacity reaches 95 percent of the safe water production capacity of the city **for two consecutive days.**
 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 2 of the Drought Contingency Plan.
 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
 4. Total daily water demand equals or exceeds 95 percent of the production capacity for three consecutive days or 100 percent of the production capacity on a single day.
 - b. *Requirements for termination.* Phase 2 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three consecutive days. Upon termination of Phase 2, Phase 1 becomes operative.
- (3) *Phase 3—Severe water shortage conditions.*
- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain nonessential water uses for Phase 3 of this plan when:
 1. Water production reaches 100 percent of the safe water production capacity of the city.
 2. Pursuant to requirements specified in the city wholesale water purchase contract with the City of Houston, notification is received requesting initiation of Phase 3 of the Drought Contingency Plan.
 3. The static water level in the city well(s) is equal to or less than 50 feet above the pump level.
 4. Total daily water demand equals or exceeds 100 percent of the production capacity for three consecutive days or 105 percent of the production capacity on a single day.
 - b. *Requirements for termination.* Phase 3 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three consecutive days. Upon termination of Phase 3, Phase 2 becomes operative.
- (4) *Phase 4—Emergency water shortage conditions.*
- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions for Phase 4 of this plan when the city manager, or his/her designee, determines that a water supply emergency exists based on:
 1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
 2. Natural or man-made contamination of the water supply source(s).
 - b. *Requirements for termination.* Phase 4 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of five consecutive days. Upon termination of Phase 4, Phase 3 becomes operative.

Sec. 70-169. – Drought response phases.

The city manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in section 70-167 of the plan, shall determine

that a mild, moderate, severe, or emergency condition exists and shall implement the following actions upon publication of notice in a newspaper of general circulation:

(1) *Phase 1—Mild water shortage conditions.*

- a. *Goal.* Achieve a ~~mandatory~~ **voluntary** reduction in water production below the 90 percent production capacity of the city.
- b. *Supply management measures.* The city ~~shall~~ **should** discontinue the monthly flushing of water mains, unless in response to a customer water quality complaint. Irrigation of all public landscaping areas ~~shall~~ **should** comply with the odd/even address requirements that the public are being asked to meet.
- c. ~~Mandatory water use restrictions.~~ **Voluntary water use restrictions.**
 1. Water customers ~~shall~~ **should** limit the irrigation of landscaped areas to Mondays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Tuesdays and Fridays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 9:00 a.m. and 7:00 p.m. to midnight on designated watering days.
 2. All operations of the city ~~shall~~ **should** adhere to water use restrictions prescribed for Phase 1 of the plan.

(2) *Phase 2—Moderate water shortage conditions.*

- a. *Goal.* Achieve a five percent reduction in water production.
- b. *Supply management measures.* The city shall discontinue the monthly flushing of water mains, unless in response to a customer water quality complaint. Irrigation of all public landscaping areas shall comply with the odd/even address requirements that the public are being asked to meet.
- c. ~~Water use restrictions.~~ **Mandatory water use restrictions.** Under threat of penalty for violation, the following water use restrictions shall apply to all persons:
 1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Mondays **and Thursdays** for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and **Tuesdays and** Fridays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 9:00 a.m. and between 7:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five gallons or less, or drip irrigation system.
 2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized.
 3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight.

4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
 5. Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the city.
 6. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the city, the facility shall not be subject to these regulations.
 7. The following uses of water are defined as nonessential and are prohibited:
 - (a) Wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
 - (b) Use of water to wash down buildings or structures for purposes other than immediate fire protection;
 - (c) Use of water for dust control;
 - (d) Flushing gutters or permitting water to run or accumulate in any gutter or street; and
 - (e) Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).
- (3) *Phase 3—Severe water shortage conditions.*
- a. *Goal.* Achieve a ten percent reduction in water production.
 - b. *Supply management measures.* All use of outdoor watering shall be prohibited by city personnel.
 - c. ~~*Water use restrictions.*~~ **Mandatory water use restrictions.** All requirements of Phase 2 shall remain in effect during Phase 3 except:
 1. Irrigation of landscaped areas shall be limited to ~~designated watering days~~ **Mondays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Fridays for customers with a street address ending in an odd number (1, 3, 5, 7 or 9)** between the hours of 12:00 midnight and 9:00 a.m. and between 7:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, only. The use of hose-end sprinklers or permanently installed automatic sprinkler system is prohibited at all times. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized. Furthermore the use of water for the watering of foundations will be exempted if a soaker hose is utilized.
 2. The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the city.
 3. The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.
- (4) *Phase 4—Critical water shortage conditions.*
- a. *Goal.* Achieve a 15 percent reduction in water production.
 - b. *Supply management measures.* All use of outdoor watering shall be prohibited by city personnel.
 - c. ~~*Water use restrictions.*~~ **Mandatory water use restrictions.** All requirements of Phase 2 and 3 shall remain in effect during Phase 4 except:
 1. Irrigation of landscaped areas is absolutely prohibited.

2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.
3. The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
5. No applications for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.
- 6. The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the city.**

Sec. 70-170. Enforcement.

- (a) No person shall knowingly or intentionally allow the use of water from the city for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the city manager, or his/her designee, in accordance with provisions of this plan.
- (b) Any person who violates this plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than \$100.00 and not more than \$500.00. Each day that one or more of the provisions in this plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this plan, the city manager shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a reconnection charge, hereby established at \$50.00, and any other costs incurred by the city in discontinuing service. In addition, suitable assurance must be given to the city manager that the same action shall not be repeated while the plan is in effect. Repeat offenses will be subject to reconnect fees of twice the amount stated above. Compliance with this plan may also be sought through injunctive relief in the district court.
- (c) Any person, including a person classified as a water customer of the city, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this plan and that the parent could not have reasonably known of the violation.
- (d) Any police officer or other employee as designated by the city manager, may issue a citation to a person reasonably believed to be in violation of this article. The citation shall be prepared in duplicate and shall contain the name and addresses of the alleged violator, if known, the offense charged, and shall direct the violator to appear in the municipal court on the date shown on the citation. The alleged

violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

Sec. 70-171. Variances.

- (a) The city manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:
 - (1) Compliance with this plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the plan is in effect.
 - (2) Alternative methods can be implemented which will achieve the same level of reduction in water use.
- (b) Persons requesting an exemption from the provisions of this article shall file a petition for variance with the city within five days after the plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the city manager, or his/her designee, and shall include the following:
 - (1) Name and address of the petitioner(s).
 - (2) Purpose of water use.
 - (3) Specific provision(s) of the plan from which the petitioner is requesting relief.
 - (4) Detailed statement as to how the specific provision of the plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this article.
 - (5) Description of the relief requested.
 - (6) Period of time for which the variance is sought.
 - (7) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this plan and the compliance date.
 - (8) Other pertinent information.
- (c) Variances granted by the city shall be subject to the following conditions, unless waived or modified by the city manager or his/her designee:
 - (1) Variances granted shall include a timetable for compliance.
 - (2) Variances granted shall expire when the plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
- (d) No variance shall be retroactive or otherwise justify any violation of this plan occurring prior to the issuance of the variance.