

City Council Work Session Handouts

April 6, 2015

- I. Review and Discuss the Regulations of Community and Group Homes
- II. Review and Discuss the Status of Water Restrictions and Water Quality Initiatives

AN OVERVIEW OF THE FAIR HOUSING ACT & RICHARDSON'S APPROACH TO REGULATING GROUP AND COMMUNITY HOMES

City Council Briefing: April 6, 2015

Presentation Overview

- Introduction
- Fair Housing Act Overview
- Richardson's Group and Community Home Regulations Overview
- Review of Fair Housing Act Cases
- Current Ordinance Amendment Considerations
- Group and Community Group Home Resources

Introduction

- Certificate of Occupancy application received for a Group Home in the Fairways of Sherrill Park in October 2014
 - 16 Residents, 4 Caregivers
- The operator revised the Certificate of Occupancy application based on initial discussions with staff
 - 12 Residents, 2 Caregivers
- About the Home
 - 5,639 sq. ft.
 - 2 living - 1,140 sq. ft., 2 dining - 378 sq. ft., kitchen - 168 sq. ft.
 - 6 bedrooms - 441, 294, 240, 240, 210, 192 sq. ft.
 - 3 ½ restrooms
 - Can accommodate up to 6 vehicles on property

Introduction

- Informational neighborhood meeting held in October 2014
- Certificate of Occupancy issued in November 2014
- In December 2014, residents expressed concern to City Council about:
 - Maximum number of residents permitted
 - Reasonable accommodations policy and procedure
 - Notice to impacted neighborhoods
 - Minimum distance requirements

Introduction

- In January 2015, residents presented City Council with a draft ordinance that includes the following recommendations:
 - Maximum number of residents permitted - 6
 - Zoning Board of Adjustment (ZBA) would hear all requests for a reasonable accommodation
 - Notification would be in accordance with current ZBA practices
 - Separation between a group/community home and any other group/community home – ½ mile

Introduction

- In January 2015, the City Manager's Office solicited the help of the Texas Municipal League (TML) in locating a firm to conduct a thorough assessment of the City's policies and procedures for regulating group and community group homes
- In response to our request, TML's legal department recommended numerous firms, including Taylor, Olson, Adkins, Sralla, & Elam of Fort Worth, Texas
- George Staples, Jr. lead a team of five attorneys who conducted more than 110 hours of research, survey work and review of the draft ordinance presented by residents as well as participated in more than 5 hours of briefings, including two City Council Executive Sessions in February and March

Taylor, Olson, Adkins, Sralla & Elam

- Over 200 years of combined experience serving municipalities and other governmental entities
- Serve 35 plus cities as general counsel in North Central Texas and throughout the state, including: Flower Mound, North Richland Hills, and Southlake
- Serve 7 entities as general counsel, including: Johnson County Central Appraisal District and the North Central Texas Workforce Commission
- Serve numerous cities as special counsel, including: Frisco and Carrollton

George Staples, Jr.

- B.A. in Government from North Texas State University and received his LLB (now Juris Doctor) from the University of Texas School of Law
- Has been admitted to practice before the Texas Supreme Court, the Northern, Eastern and Southern Districts of Texas, the Fifth Circuit Court of Appeals and the United States Supreme Court
- Served as Director of the Texas City Attorneys Association as a member of The Center for American and International Law
- Has an active trial and appellate litigation practice defending cities and public officials in annexation, civil rights, personnel actions, eminent domain, zoning and other issues

FAIR HOUSING ACT OVERVIEW

Fair Housing Act Overview

- The Fair Housing Act (FHA) was originally passed as Title VIII of the Civil Rights Act of 1968
 - Provided protection from discrimination in housing on the basis of race, color, religion or national origin
 - Gender was added to the FHA as a protected class in 1974

Fair Housing Act Overview

- The FHA was amended again in 1988 to extend protection to the handicapped and make it unlawful to discriminate in the sale or rental, or otherwise make unavailable or deny, a dwelling to any buyer or renter because of a handicap of:
 - That buyer or renter,
 - A person residing in or intending to reside in that dwelling after it is sold, rented or made available, or
 - Any person associated with that buyer or renter

Fair Housing Act Overview

- The statutory definition of discrimination also includes:
 - “...a refusal to make reasonable accommodations in rules, policies, practices or services when such accommodations may be necessary to afford such person equal opportunity to use and enjoy a dwelling.”¹
 - The prohibition against discrimination against those with handicaps also applies to zoning decisions and practices.²

(1) 42 U.S.C.A 3604 (f)(b)(West)

(2) H.R. REP. No. 711, *supra* note 34, at 24, reprinted in 1988 U.S.C.C.A.N. at 2185

Fair Housing Act Overview

- With respect to a person, “Handicap” means:
 - A physical or mental impairment which substantially limits one or more of such person's major life activities,
 - A record of having such an impairment, or
 - Being regarded as having such an impairment

Fair Housing Act Overview

- In 1992, the FHA was extended to include recovering substance abusers as a protected class
- The House Report accompanying the FHA specifically stated that the definition of handicap included:
 - “Individuals who have recovered from an addiction or are participating in a treatment program or self-help group such as Narcotics Anonymous.”¹
 - “Depriving such individuals housing, or evicting them, would constitute irrational discrimination that may seriously jeopardize their continued recovery.”¹

(1) *H.R. REP. No. 711, supra note 34, at 24, reprinted in 1988 U.S.C.C.A.N. at 2185*

Fair Housing Act Overview

- The FHA protects persons with the following list of diseases, disorders, and conditions:
 - Orthopedic
 - Visual
 - Speech
 - Hearing impairments
 - Cerebral palsy
 - Epilepsy
 - Muscular Dystrophy
 - Multiple sclerosis
 - Cancer
 - Heart disease
 - Diabetes
 - Mental retardation
 - Emotional illness
 - Drug addiction and alcoholism

Fair Housing Act Overview

- The FHA does not protect persons:
 - Who currently use illegal drugs
 - Who have been convicted of the manufacture or sale of illegal drugs
 - Whose tenancy would constitute a direct threat to the health or safety of other individuals
 - Whose tenancy would result in substantial physical damage to the property of others

Fair Housing Act Overview

- An accommodation request is not reasonable if the request:
 - Causes an undue financial or administrative burden on a city
 - Creates a fundamental alteration in the City's land use and zoning scheme

Application of the FHA to Group Homes

- The FHA does not preempt local zoning laws
- Instead, the FHA prohibits municipalities from making zoning or land use decisions or implementing land use policies that exclude or otherwise discriminate against protected persons
 - “While the reasonable accommodation requirement in the FHA takes away some municipal zoning power, it does so only to the extent that government regulations conflict with the policy behind the FHA: to protect handicapped from baseless stereotyping and assist in their ability to achieve normalization and community integration.”¹

Application of the FHA to Group Homes

- Legal factors courts consider when evaluating the rights of group homes under the FHA:
 - Discriminatory Intent – A willful or unintentional action, statement, etc. that results in discrimination against the handicapped
 - Discriminatory Impact – Facially-neutral regulations that are enforced uniformly but have a discriminatory effect on the handicapped
 - Reasonable Accommodation – A modification in rules, policies, practices or services to afford a handicapped person equal opportunity to use and enjoy a dwelling of their choice

RICHARDSON'S REGULATIONS

Non-Related Occupants

- No more than 4 non-related people may occupy a single-family dwelling under any circumstance without relief from the following standards being granted via a reasonable accommodation.
 - A number of persons, but not exceeding two, living and cooking together as a single housekeeping unit, though not related by blood, adoption or marriage, shall be deemed to constitute a family
 - One-family dwellings may have a maximum number of two rental rooms and a maximum of two individual renters or tenants

Group Home vs. Community Home

- Group Home
 - Housing occupied by groups of unrelated individuals with disabilities, which may or may not be provided by organizations that also offer various services for individuals with disabilities living in the homes.¹
 - Not permitted by right in single family zoning districts like in other communities
 - Must request a reasonable accommodation and Certificate of Occupancy prior to operating

(1) Joint Statement of the Department of Justice and The Department of Housing and Urban Development: Group Homes, Local Land Use, and the Fair Housing Act, August 18, 1999

Group Home vs. Community Home

- Community Home
 - Entity that provides food and shelter, personal guidance, care, habitation services and supervision to persons with disabilities who reside in the home. Must be:
 - Operated by the Texas Department of Mental Health and Mental Retardation
 - Certified by the Texas Department of Human Services as a provider under the medical assistance program serving persons in intermediate care facilities or persons with mental retardation, or
 - Licensed under Chapter 247, Health and Safety Code as an assisted living facility

2012 City Council Action

- City Council adopted the Texas Community Homes for Disabled Persons Location Act
 - Authorized the City to enforce provisions of the Act, including:
 - Maximum of 6 residents; 2 supervisors
 - ½ mile separation requirement
 - Existing homes were “grandfathered”
 - Maximum 6 vehicle requirement

2012 City Council Action

- There is no state regulation for group homes that is equivalent to the Texas Community Homes for Disabled Persons Location Act
- As such, City Council mandated that all group homes shall obtain a certificate of occupancy prior to operating / occupying a residence
 - An administrative reasonable accommodations hearing is conducted prior to approving any certificate of occupancy
 - An interior and exterior inspection of the property is conducted prior to approving any certificate of occupancy
 - Additional inspections conducted as appropriate

Application - Required Information

- Property owner
- Onsite responsible party
- Offsite emergency contacts
- Total number of residents
- Age of residents
- Disability of residents
- Total number of employees / caregivers
- Licensed with State of Texas
- Total square feet
 - Sleeping area
 - Living area
 - Dining area
 - Kitchen
- Number of restrooms
- Total linear feet of street frontage
- Number of vehicles

Reasonable Accommodation Hearing - Purpose

- Provides guidelines for the requirements of a certificate of occupancy for any group or community home located within the City
- Provides guidelines for the City's compliance to the requirements of the FHA
- A request for reasonable accommodation may be made by any person with a disability, the person's representative, a developer, or a provider of housing for individuals with disabilities
- The request must state the reason for the accommodation from the zoning or development regulations and the basis for the request

Reasonable Accommodation Hearing - Procedure

- The Director of Community Services (or designee) conducts a hearing to determine whether the request for reasonable accommodation should be granted
 - Prior to final determination being made, the City Attorney reviews all pertinent information and provides the Director of Community Services legal counsel regarding all requests for a reasonable accommodation

Reasonable Accommodation Hearing - Procedure

- The applicant or applicant's representative must demonstrate that:
 - The applicant (or the person on whose behalf the applicant is requesting the accommodation) suffers from a disability as defined by the Fair Housing Act
 - The accommodation is both reasonable and necessary

Reasonable Accommodation Hearing - Procedure

- The matter set out in the request for reasonable accommodation shall be granted unless:
 - The accommodation would fundamentally alter the City's land use and zoning patterns
 - If the impact of the use on its surroundings is greater than that of other uses permitted in the zoning district
- A reasonable accommodation for an increase in the number of residents terminates if the property ceases to be operated as housing for disabled persons as defined by the Fair Housing Act

Elements of the Hearing & Inspection

- Occupancy standards

Occupancy Standards

- Section 6-367 (44) states:
 - Each bedroom in a dwelling unit occupied by one person shall contain 70 square feet of floor area, and that each bedroom occupied by more than one person shall contain at least 50 square feet of floor area for each occupant thereof

Occupancy Standards

- A bedroom must comply with all applicable provisions of the International Residential Code and Code of Ordinances including:
 - Minimum lighting requirements
 - Minimum ventilation requirements
 - Minimum room width
 - Minimum ceiling height
 - Required emergency escape windows and doors
 - Required smoke detectors in the vicinity

Occupancy Standards

Table A - Minimum Area Requirements

	1-2 Occupants	3-5 Occupants	6 or more Occupants
Living Room	No Requirement	120	150
Dining Room	No Requirement	90	100

a. See Section 6-367 (50) for limitations on determining the minimum occupancy area for sleeping purposes.

b. See Section 6-367 (51) for combined living room/dining room spaces.

Occupancy Standards

Minimum Area Requirements Living/Sleeping Room

	1-2 Occupants	3-5 Occupants	6 or more Occupants
1 person using for sleeping	No Requirement	190 (120+70)	220 (150+70)
2 people using for sleeping	No Requirement	220 (120+100)	250 (150+100)
3 people using for sleeping	NA	270 (120+150)	300 (150+150)

Occupancy Standards

Minimum Area Requirements Dining/Sleeping Room

	1-2 Occupants	3-5 Occupants	6 or more Occupants
1 person using for sleeping	No Requirement	160 (90+70)	170 (100+70)
2 people using for sleeping	No Requirement	190 (90+100)	200 (100+100)
3 people using for sleeping	NA	240 (90+150)	250 (100+150)

Occupancy Standards

Minimum Area Requirements Combined Living/Dining/Sleeping Room

	1-2 Occupants	3-5 Occupants	6 or more Occupants
1 person using for sleeping	No Requirement	280 (120+90+70)	320 (150+100+70)
2 people using for sleeping	No Requirement	310 (120+90+100)	350 (150+100+100)
3 people using for sleeping	NA	360 (120+90+150)	400 (150+100+150)

Maximum Occupancy Allowed

- Occupancy is limited to the maximum permitted by the least area provided
 - Occupancy in bedrooms is limited by one set of standards
 - Occupancy in living / dining rooms is limited by another set of standards
 - The standard that permits the least number of occupants is the standard that is applied and enforced

Occupancy Standards

- Section 6-367 (47)
 - Bedrooms shall not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces, except units that contain less than two bedrooms

Occupancy Standards

- Section 6-367 (48)
 - Every bedroom shall have access to at least one water closet and one lavatory without passing through another bedroom

Occupancy Standards

- Section 6-367 (53)
 - All spaces to be occupied for food preparation shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner
 - There shall be adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage

Elements of the Hearing & Inspection

- Occupancy standards
- Parking standards

Parking Standards

- One vehicle per bed room standard
 - The final number approved is dependent of physical attributes of a given property
- It is an offense for a person lawfully in the possession of a motor vehicle to park such motor vehicle between the hours of 2:00 a.m. and 8:00 a.m. on a public street contiguous to or adjacent to a residential lot or tract unless such person is a resident or occupant of such residential lot

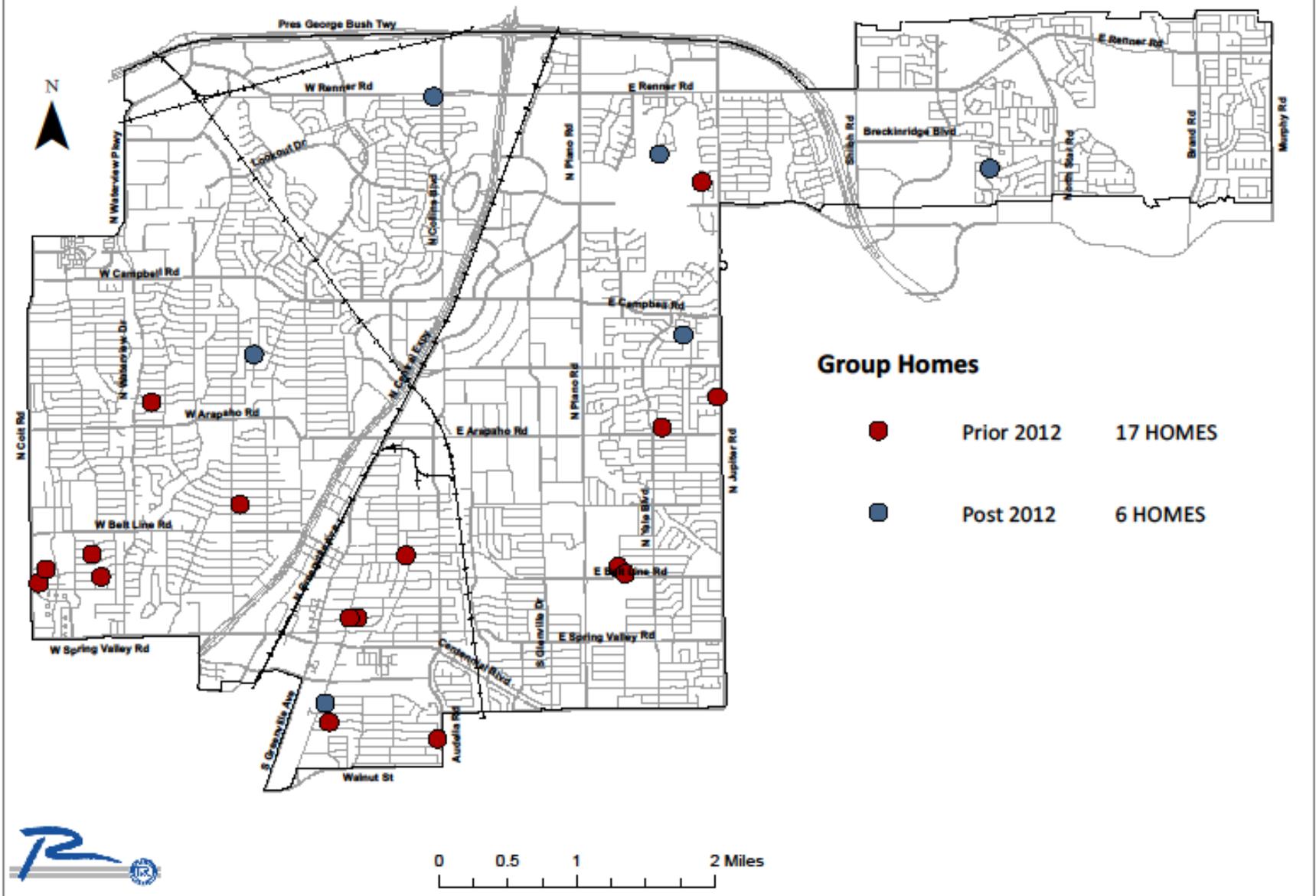
Elements of the Hearing & Inspection

- Occupancy standards
- Parking standards
- Minimum property standards
- Electrical
- Plumbing
- Mechanical
- Fire
- Nuisance issues: noise, trash, etc.

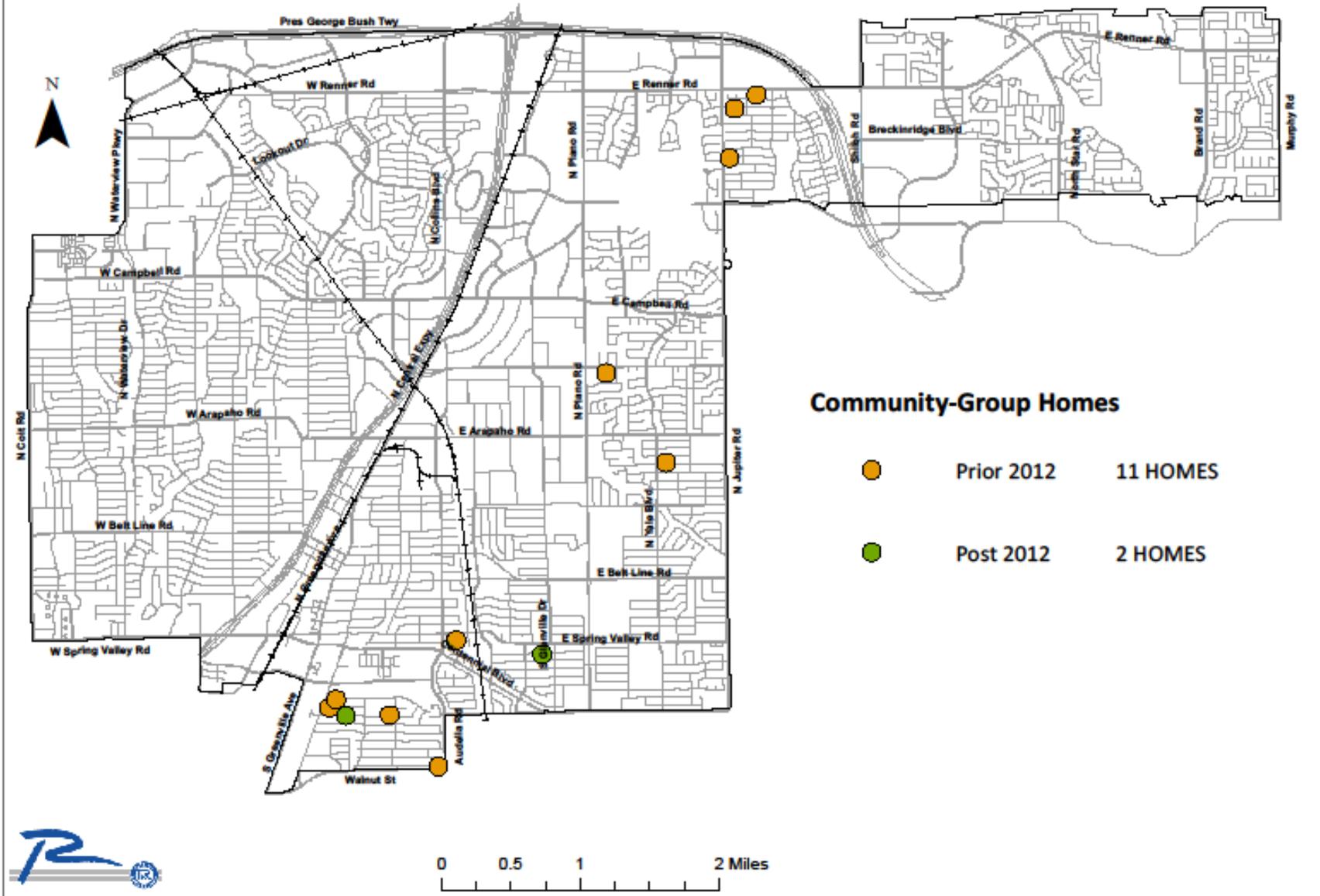
Code Compliance

- Group homes and community homes must comply with all applicable regulations
- The only relief provided is that associated with the reasonable accommodation

Group Homes As Of April 1, 2015



Community Homes As Of April 1, 2015



Known Group & Community Homes As Of April 1, 2015

City	# of Group Homes	# of Community Group Homes ⁽¹⁾	Total
Richardson	23	13	36
Plano	18 ⁽²⁾	20	38
Garland	27 ⁽³⁾	10	37

1. As reported by the State of Texas. Only includes residential dwelling, not institution or commercial based homes.
2. As found by Community Services staff via online research. Not a complete list. Staff contacted the Substance Abuse and Mental Health Service Administration, the Department of State Health Services, and over 30 North Texas service providers in an attempt to understand the universe of group homes in adjacent cities. Most organizations were unable to provide information about housing because of privacy and safety protocols.
3. As reported by City of Garland to U.S. Department of Housing & Urban Development in 2013 Consolidated Annual Performance Evaluation.

REVIEW OF FAIR HOUSING ACT CASES

FHA Cases

- City of Cleburne v. Cleburne Living Center (1985)
 - The City denied a request for a special use permit to operate a group home for mentally retarded adults
 - The group home challenged the decision on equal protection grounds
 - The U.S. Supreme Court held that a requirement for a special use permit for group homes for the mentally retarded but not for any other type of similar living arrangement violated equal protection because there was no “rational basis” for the separate requirement
 - As a result, pressure for congressional action increased and legislators responded with Fair Housing Act Amendments of 1988

FHA Cases

- Oxford House-C v. City of St. Louis (1994)
 - Discriminatory intent alleged when group homes were denied use permits as a result of community protest
 - The City ultimately escaped a finding of discrimination due to the Oxford House-C's failure to follow the application process
 - The Court ruled that the limitation of eight occupants was not on its face a violation of the FHA

FHA Cases

- Oxford House-C v. City of St. Louis (1994) - Continued
 - However, the group home sued without seeking a variance so the city did not fail to consider or grant a reasonable accommodation
 - Had the city failed to grant a reasonable accommodation if the group home requested a variance in accordance with the application process, the Court's finding would have very likely invalidated the occupancy limitation
 - The City of St. Louis has responded accordingly
 - Currently at least 3 Oxford Houses are operating within St. Louis' limits with more than 8 occupants

FHA Cases

- City of Edmonds v. Oxford House, Inc. (1995)
 - Oxford House operated a group home for 10-12 adults recovering from alcoholism and drug addiction in a neighborhood zoned for single family residences
 - The City issued citations to the owner and a resident of the house charging violation of the City's zoning code, which provides that the occupants of a single family dwelling must compose a family

FHA Cases

- City of Edmonds v. Oxford House, Inc. - Continued
 - The U.S. Supreme Court ruled that a limitation on the number of unrelated persons residing in a dwelling was exempted by the FHA
 - The Court concluded that the FHA prohibits a city from enforcing zoning regulations that limit the number of unrelated persons who may live in a dwelling located in an area zoned for single family use if no similar restrictions are imposed on all residents of all dwellings

FHA Cases

- Avalon Residential Care Homes, Inc. v. City of Dallas (2000)
 - City staff recommended approval of the special use permit application which would have authorized the placement of a group home within 1000 feet of another group home
 - The Planning Commission and City Council denied the special use permit due to generalized perceptions about disabilities and unsubstantiated speculations about threats to health, safety and welfare

FHA Cases

- Avalon Residential Care Homes, Inc. v. City of Dallas - Continued
 - The U.S. District Court – Northern District of Texas determined the standard was facially neutral but stated:
 - “A city must be willing to adjust to the particular circumstances of each case and interpret its regulations flexibly so as to reasonably accommodate handicapped persons in its zoning decisions. The city’s ordinance sets a framework for decision-making, but that process fails if those decisions are based on generalized stereotypes or political pressure.”¹

(1) *Avalon Residential Care Homes, Inc. v. City of Dallas*, 130 F. Supp. 2d 833 (N.D. Tex. 2000) *Id.* At 841

FHA Cases

- Avalon Residential Care Homes, Inc. v. City of Dallas - Continued
 - The Court also denied the City of Dallas' request for summary judgment and stated there was a “triable issue” of fact over whether the city's denial of the SUP constituted a failure of the City to grant a reasonable accommodation

CURRENT ORDINANCE AMENDMENT CONSIDERATIONS

Reasonable Accommodation Policy & Notification

- Requests for a reasonable accommodation must be evaluated against “objectively valid” standards
 - Regulations that promote public health and safety and are narrowly designed to reach specific ends - occupancy, building, fire, etc.
- Requests for a reasonable accommodation cannot be denied based on citizen complaints, public perception, or speculation about threats to safety
 - Discriminatory statements of opposition or disparagement of the persons occupying or operating a proposed facility may not be considered

Reasonable Accommodation Policy & Notification

- “In the same way a local government would break the law if it rejected low-income housing in a community because of neighbors’ fears that such housing would be occupied by racial minorities, a local government can violate the Federal Housing Act if it blocks a group home or denies a requested reasonable accommodation in response to neighbors’ stereotypical fears or prejudices about persons with disabilities.”¹

(1) Joint Statement of the Department of Justice and The Department of Housing and Urban Development: Group Homes, Local Land Use, and the Fair Housing Act, August 18, 1999

Reasonable Accommodation Policy & Notification

- An administrative hearing establishes an unbiased, rational framework for consideration of a reasonable accommodation and thus protects a city from litigation relating to discrimination claims
- A public hearing raises citizen expectations that a city has the power to bar or otherwise limit group homes when legally a city must provide a reasonable accommodation regardless of public opinion if the proposal is justified
 - Garland's City Attorney's Office reported that the City is considering moving from a public hearing to an administrative hearing due to this very issue

Reasonable Accommodation Policy & Notification

- **City Council Direction: Continue to utilize an administrative hearing to review requests for a reasonable accommodation or assign the duty to a board, such as the Zoning Board of Adjustment.**

Maximum Number of Residents Permitted

City (Zoning Definition)	Number of Non-Related Occupants Allowed By Right (Without a Reasonable Accommodation)
Richardson (Family)	4
Garland (Family)	4
Fort Worth (Family)	5
Dallas (Handicapped Group Dwelling)	6
Plano (Household Care Facility)	8

Maximum Number of Residents Permitted

- Richardson addresses the number of unrelated individuals that can occupy a single family dwelling through its zoning ordinance just like every other city surveyed
- Richardson's ordinance permits the least number of unrelated occupants by right of any city surveyed
- All cities must consider and provide a reasonable accommodation if appropriate, regardless of how many occupants are permitted by right by the applicable zoning definition

Maximum Number of Residents Permitted

- The City Attorneys in the Cities of Plano and Garland confirmed that their cities do consider requests for a reasonable accommodation
 - 8 and 4 occupants, respectfully, is not the maximum of number occupants permitted
 - Requests to exceed the number of occupants permitted by right are considered on a case by case basis and a higher occupant count is approved via a reasonable accommodation if warranted by the application of objectively valid standards

Maximum Number of Residents Permitted

- **City Council Direction: Maintain the maximum number of non-related occupants permitted by right in a single family dwelling at 4 or increase the maximum number of non-related occupants permitted by right to a higher number by adding new definitions to the zoning ordinance**

Minimum Distance Requirement

- The Joint Statement produced by United States Departments of Justice and Housing & Urban Development expresses the opinion that distance restrictions are incompatible with the FHA
 - “The Department of Justice and HUD take the position, and most courts that have addressed the issue agree, that density restrictions are generally inconsistent with the FHA.”¹

(1) Joint Statement of the Department of Justice and The Department of Housing and Urban Development: Group Homes, Local Land Use, and the Fair Housing Act, August 18, 1999

Minimum Distance Requirement

- If applied, distance restrictions must be necessary to prevent “over-concentration” to ensure individuals with disabilities are not harmed, not to keep group homes from locating within certain neighborhoods
 - “We [DOJ & HUD] also believe, however, that if a neighborhood came to be composed largely of group homes, that could adversely affect individuals with disabilities and would be inconsistent with the objective of integrating persons with disabilities into the community.” ¹
 - “This objective does not, however, justify requiring separations which have the effect of foreclosing group homes from locating in entire neighborhoods.” ¹

(1) Joint Statement of the Department of Justice and The Department of Housing and Urban Development: Group Homes, Local Land Use, and the Fair Housing Act, August 18, 1999

Minimum Distance Requirement

- Federal circuit courts have interpreted the FHA to entitle disabled person to live in the dwelling “of their choice”, not simply an opportunity to live somewhere in a city
- The House Report accompanying the FHA speaks to this point:
 - “The Act is intended to prohibit the application of special requirements through land-use regulations, restrictive covenants, and conditional or special use permits that have the effect of limiting the ability of such individuals to live in the residence of their choice in the community.”¹
 - “The purpose of reasonable accommodation is to facilitate the integration of persons with disabilities into all communities.”²

(1) *H.R. REP. No. 711, supra note 34, at 24, reprinted in 1988 U.S.C.C.A.N. at 2185*

(2) *Dr. Gertrude A. Barber Ctr., Inc. v. Peters Tp., 273 F. Supp. 2d 643, 652 (W.D. Pa. 2003)*

Minimum Distance Requirement

- **City Council Direction: Continue to review the location of proposed group homes on a case by case basis carefully evaluating the unique circumstances of each request and the potential impact on a neighborhood or adopt a city-wide distance separation requirement**

Occupant Information

- A city may not legally require confidential medical records or inquire into the nature or severity of an individual's disability
 - To do so would violate the Health Insurance Portability and Accountability Act (HIPAA) and FHA
 - None of the cities surveyed reported requiring specific information about individual occupants
- As a condition of a Certificate of Occupancy, a city may require the operator of a group home to confirm that all occupants are handicapped as defined by the FHA
 - If an operator is found to be operating in a manner that is to contrary to the terms of the Certificate of Occupancy, it can be revoked

GROUP & COMMUNITY GROUP HOME RESOURCES

Next Steps

- Create a Group & Community Homes Resource Page on cor.net that will include:
 - Reasonable Accommodation Policy
 - List of Occupancy, Parking, etc. regulations
 - Frequently Asked Questions
 - Links to resources utilized in this presentation
 - List of Group and Community Certificates of Occupancy issued
 - Express a Concern link

Group Home / Community Home Discussion

Water Conservation & Water Quality Update



City Council Briefing: April 6, 2015

Water Conservation



Water Conservation Update

- ∞ Since August 2011, Richardson along with all of the North Texas Municipal Water District's member and customer cities have been in mandatory water restrictions
- ∞ During this time, the restrictions have changed 12 times
 - The most changes occurring in 2014
- ∞ Circumstances including below average rainfall, low reservoir supplies, and the absence of the Lake Texoma water supply for a few years all contributed to the need for mandatory water restrictions



Stage 3 Water Restrictions Revised Watering Schedule

The City of Richardson is altering its irrigation schedule effective July 19, 2014. The change allows for an every other week watering schedule instead two times per month and allows an extra weekend of outdoor irrigation. To transition to an every-other-week schedule, the City will allow residents an extra lawn irrigation day the last weekend of July.

Under Modified Stage 3 water restrictions, lawn irrigation is **prohibited from 10 a.m. to 6 p.m.** or during periods of rain.

Report violations by calling 972-744-4111 or by using the MyRichardson mobile app. For more information on water restrictions, visit cor.net/WaterConservation or call the Public Services Department at 972-744-4220.

July 20 and 26 are additional water days

Lawn Watering Schedule													
July 2014							September 2014						
	1	2	3	4	5			1	2	3	4	5	6
6	7	8	9	10	11	12	7	8	9	10	11	12	13
13	14	15	16	17	18	19	14	15	16	17	18	19	20
20	21	22	23	24	25	26	21	22	23	24	25	26	27
27	28	29	30	31			28	29	30				

August 2014							October 2014						
	1	2	3	4	5	6		1	2	3	4	5	6
					1	2	5	6	7	8	9	10	11
10	11	12	13	14	15	16	12	13	14	15	16	17	18
17	18	19	20	21	22	23	19	20	21	22	23	24	25
24	25	26	27	28	29	30	26	27	28	29	30	31	

■ Water days for even numbered addresses (ending in 2, 4, 6, 8, 0)
■ Water days for odd numbered addresses (ending in 1, 3, 5, 7, 9)

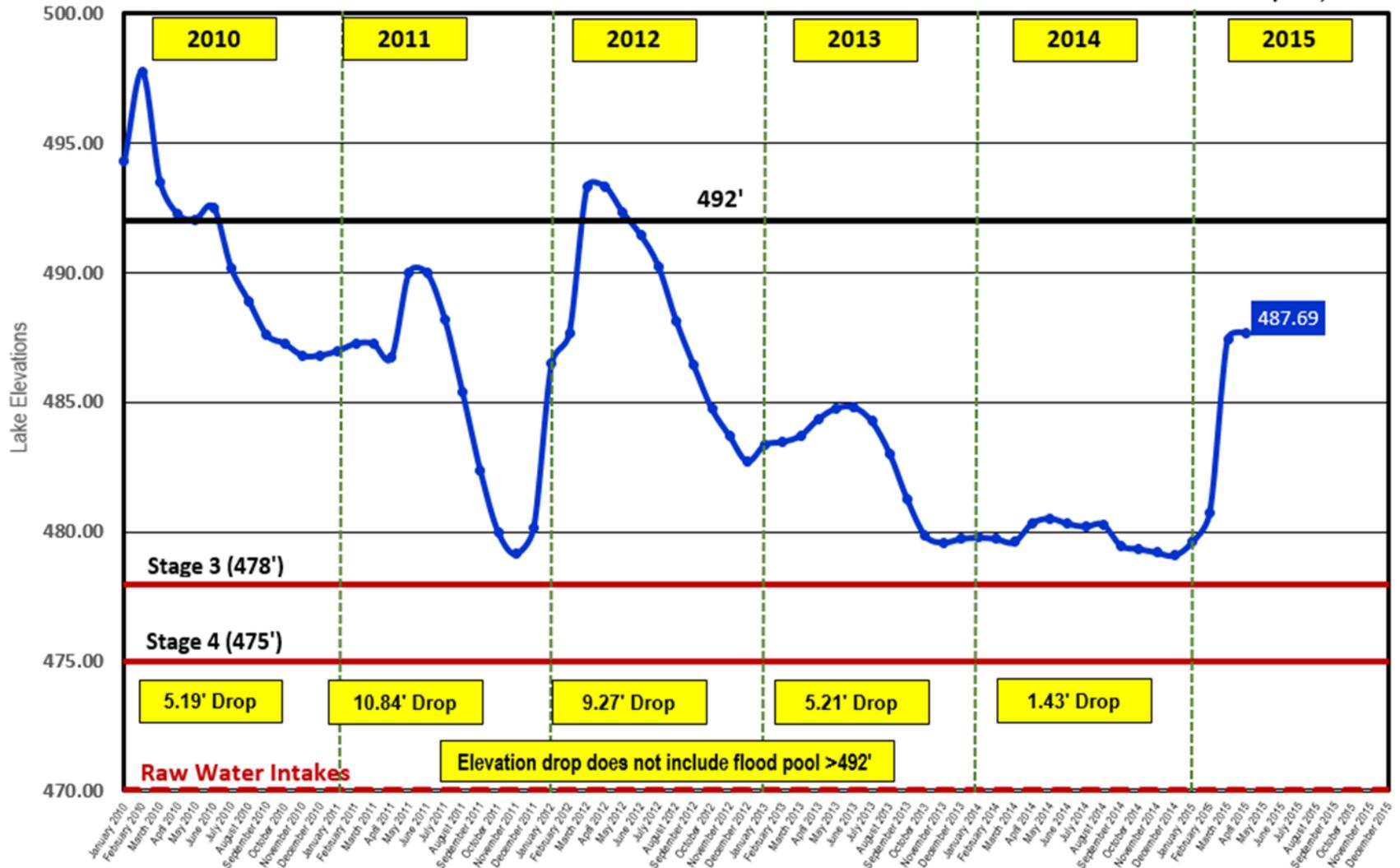
Overview of Water Restrictions

Date	Water Restriction Measures
November 1, 2013 – March 31, 2014	2x/month
April 1, 2014 – July 18, 2014	2x/month, no watering from 10am-6pm
July 19, 2014 – August 31, 2014	Every other week, no watering from 10am-6pm
September 1, 2014 – October 31, 2014	1x/week, no watering from 10am-6pm
November 1, 2014 – March 31, 2015	Every other week
April 1, 2015 – May 31, 2015	Every other week, no watering from 10am-6pm

NTMWD Reservoir Update

Reservoir	Elevation on April 6, 2014	Elevation on April 6, 2015	Increase in Elevation	Current Height Below Conservation Pool (Ft.)	Current Percent Full
Lake Lavon	479.98 ft.	487.7 ft.	7.72 ft.	- 4.3 ft.	79.4%
Lake Tawakoni	427.67 ft.	430.90 ft.	3.23 ft.	- 6.6 ft.	74.1%
Lake Chapman	428.01 ft.	437.79 ft.	9.78 ft.	- 2.21 ft.	85.6%
Lake Texoma	608.60 ft.	613.77 ft.	5.17 ft.	- 3.23 ft.	90.9%

Lake Lavon Elevation History



Status of Water Restrictions

- ∞ Will remain in every other week watering in April
 - No lawn watering between the hours of 10am-6pm
- ∞ Will continue to monitor reservoir elevations and forecasts to determine a strategy for May – October
 - Anticipate lessening restrictions
 - Possibly a transition to once a week, then twice a week
 - Decision will be made in late April at the NTMWD Board Meeting



Status of Water Restrictions

- ∞ Transition to lessen restrictions will trigger implementation of the 2014 Water Conservation Plan
 - Twice a week watering will be the new norm
 - Transition to a 3 Stage system (currently utilizing 4 Stages)
 - Increase education and outreach programs to residents and businesses to promote new plan and smart watering practices
 - Water My Yard
 - Rainwater harvesting classes
 - Fix indoor leaks workshop
 - Smart irrigation classes

Water Quality



2014 – Unprecedented Challenges

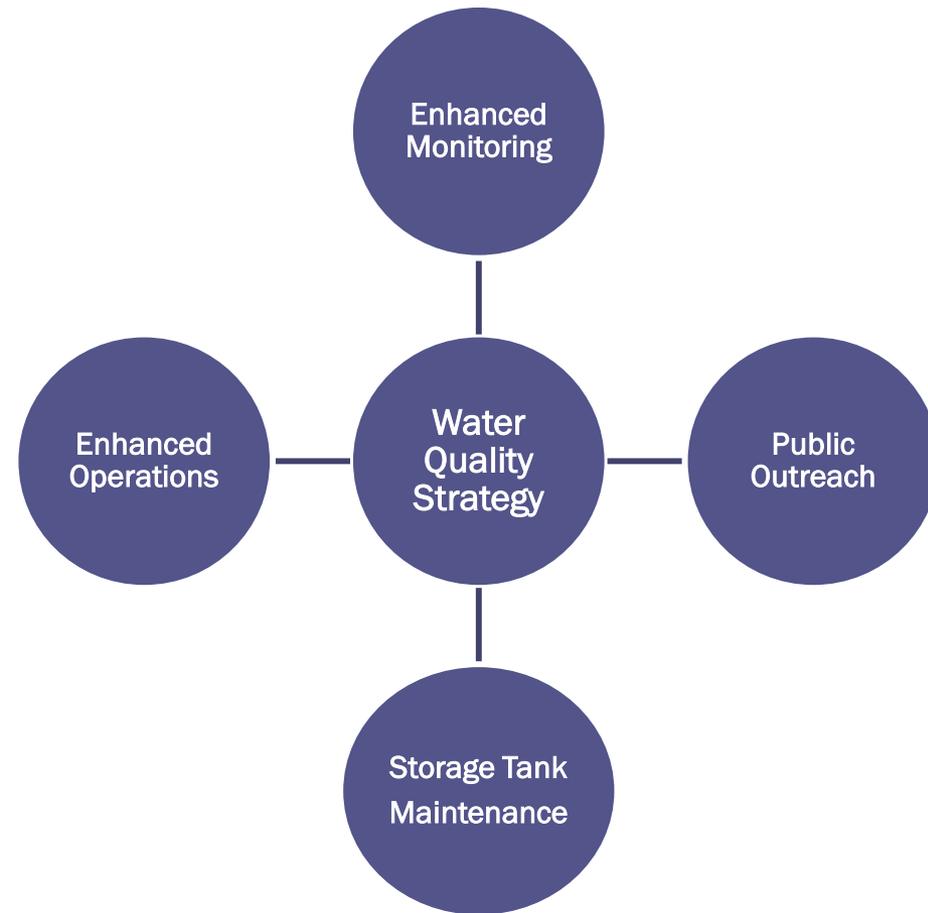
- ∞ What happens when water demand does not meet expectations?
 - Water remains in storage tanks and the system longer than desired
 - Chloramines are a combination of chlorine and ammonia
 - Added at the treatment plant to prevent bacteria from growing in the water while it is in the distribution lines
 - When outside temperatures heat up and water stays in the system too long, chloramines break down leaving the water unprotected

The Production & Quality Challenge

Balancing the need to deliver water during times of peak demand with transporting water through the distribution system as expeditiously as possible to ensure quality

Water Quality Strategy

- ∞ To address the unique challenges associated with extended restrictions, a comprehensive water quality strategy has been implemented
- ∞ Upgrades and improvements to infrastructure, operational procedures and monitoring will result in superior management for current and future water quality challenges



Storage Tank Maintenance

∞ Tank Evaluations

- 5 tank evaluations completed in FY 14/15
 - Tanks are emptied, inspected and disinfected
 - Resulting engineering studies will assist with planning for maintenance and future upgrades

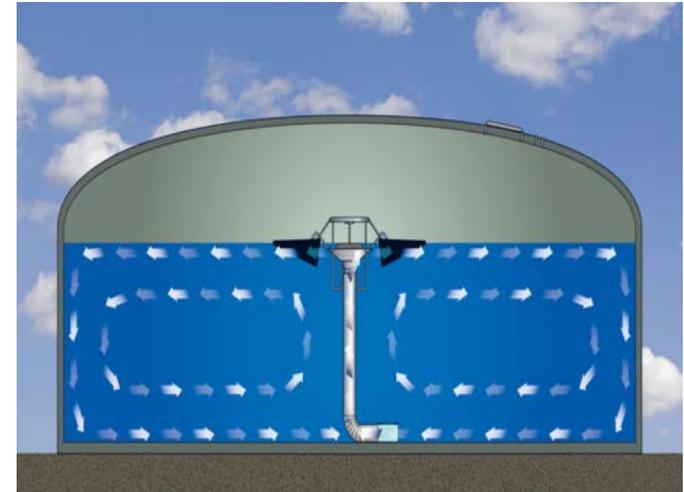
∞ Tank Destratification/Mixing

- Mixing systems were installed in 5 tanks in FY 14/15
 - Allows for continuous circulation throughout tank
 - Reduces water age and allows uniform quality of water

Tank Mixers

- ∞ Solar Bee Mixing System
 - Allows continuous circulation throughout tank
 - Prevents stratification
 - Solar Powered
 - Installed while storage facility is in full operation

- ∞ Tideflex Mixing System
 - Allows circulation throughout tank when filling
 - Prevents stratification
 - Installed during storage facility rehabilitation



Storage Tank Management

∞ Tank Operational Practices

- Deep Cycling / Short Cycling to manipulate tank levels to provoke water movement
- Tank level management in periods of low demand during the summer months to reduced excess storage
- Decommissioning unneeded storage to limit total volume of storage when conditions allow

Enhanced Monitoring

- ∞ Continuous monitoring of Chloramines is required to ensure water quality
- ∞ Historically these samples have been collected in the field by water quality inspectors
 - The number of samples limited
 - Issues are often not identified until Chloramine levels have started to fall



Enhanced Monitoring

- ∞ To improve efficiency and situational awareness within the distribution system, water quality analyzers are being installed at all storage facilities in conjunction with the SCADA System Upgrade project
 - Will enable remote monitoring via new water quality SCADA dashboard
 - Will provide on demand monitoring of Chloramine, Temperature and PH

Enhanced Operations

∞ Hydrant Flushing

- Flushing is a necessary process for water quality and required by Texas Commission on Environmental Quality
- City performs preemptive and reactive flushing while monitoring the water quality
- When possible, water is captured in trucks to be used on city landscape to minimize waste



Next Steps

- ☞ Tank evaluations completed in February 2015; Additional evaluations planned for FY 15/16
- ☞ Storage tank mixing equipment approved and installation to be complete by June 1, 2015
- ☞ Water Quality Analyzers installed with SCADA Project to be complete by August 1, 2015
- ☞ Awareness and Educations



Water Conservation & Water Quality Update

