

DRAFT



City of Copperas Cove

NOTICE OF MEETING OF THE GOVERNING BODY OF COPPERAS COVE, TEXAS

*An agenda information packet is available for public inspection
in the Copperas Cove Public Library, City Hall and
on the City's Web Page, www.ci.copperas-cove.tx.us*

Notice is hereby given that a **Workshop Council Meeting** of the City of Copperas Cove, Texas, will be held on **November 2, 2010** at **6:00 p.m.** in the City Hall Council Chambers at 507 South Main Street, Copperas Cove, Texas 76522, at which time the following subjects will be discussed:

A. CALL TO ORDER

B. ROLL CALL

C. WORKSHOP ITEMS

1. Presentation and discussion on Golf Course Effluent Project. ***Ken Wilson, Division Head of Parks and Leisure Services***
2. Provide direction to the City Manager regarding agenda item C-1. ***Andrea M. Gardner, City Manager***

D. ADJOURNMENT

The City Council reserves the right to adjourn into Executive Session at any time regarding any issue on this agenda for which it is legally permissible.

City Hall is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to the meeting. Please contact the City Secretary at (254) 547-4221, (254) 547-6063 TTY, or FAX (254) 542-8927 for information or assistance.

I, the undersigned authority, do hereby certify that the above Notice of Meeting of the Governing Body of the City of Copperas Cove was posted at _____, October 29, 2010, on the glass front door of City Hall, a place convenient and readily accessible to the general public at all times.

Jane Lees, TRMC, CMC

City Council Workshop

Item #: C. 1.

Date: 11/02/2010

Contact: Ken Wilson, Director of Community Services,
Community Services

Information

SUBJECT

Presentation and discussion on Golf Course Effluent Project. ***Ken Wilson, Division Head of Parks and Leisure Services***

BACKGROUND/HISTORY

FINDINGS/CURRENT ACTIVITY

ACTION OPTIONS/RECOMMENDATION

Information

SUBJECT

Provide direction to the City Manager regarding agenda item C-1. *Andrea M. Gardner, City Manager*

BACKGROUND/HISTORY

FINDINGS/CURRENT ACTIVITY

ACTION OPTIONS/RECOMMENDATION

DRAFT



City of Copperas Cove

NOTICE OF MEETING OF THE GOVERNING BODY OF COPPERAS COVE, TEXAS

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on the City's Web Page, www.ci.copperas-cove.tx.us*

Notice is hereby given that a **Regular Council Meeting** of the City of Copperas Cove, Texas, will be held on **November 2, 2010** at **7:00 p.m.** in the City Hall Council Chambers at 507 South Main Street, Copperas Cove, Texas 76522, at which time the following subjects will be discussed:

- A. **CALL TO ORDER**
- B. **INVOCATION AND PLEDGE OF ALLEGIANCE**
- C. **ROLL CALL**
- D. **ANNOUNCEMENTS**
- E. **PUBLIC RECOGNITION**
 - 1. Employee Service Awards - November 2010. **Andrea M. Gardner, City Manager**
 - Desiree Mundell, Human Resources Coordinator - 5 years
 - Greg Hernandez, Golf Course Laborer - 10 years
 - 2. Proclamation: America Recycles Day. **John Hull, Mayor**
- F. **CITIZENS FORUM** – At this time, citizens will be allowed to speak for a length of time not to exceed five minutes per person. Thirty minutes total has been allotted for this section. Pursuant to §551.042 of the Texas Open Meetings Act, any deliberation or decision about the subject of inquiry shall be limited to a proposal to place the subject on the agenda for a subsequent meeting.
- G. **CONSENT AGENDA** – All matters listed under this item are considered to be routine by the City Council and will be enacted by one motion. There will not be separate discussion of these items. If discussion is desired, that item will be removed from the consent agenda and considered separately.

1. Consideration and action on approving the minutes from the workshop council meeting of October 19, 2010. **Jane Lees, City Secretary**
2. Consideration and action on approving the minutes from the regular council meeting on October 19, 2010. **Jane Lees, City Secretary**
3. Consideration and action on authorizing the City Manager to enter into an agreement with Central Counties Center for MHMR (Mental Health and Mental Retardation) Services to occupy a designated area of the Human Resource Center for a period of two years with an option to renew one additional year. **Brian Hawkins, Recreation Specialist/Administrative Assistant of Parks and Recreation**
4. Consideration and action on authorizing the City Manager to execute a Sales Contract between the City of Copperas Cove and Dailey-Wells Communications, Inc. for the purpose of renewing a maintenance contract and renewing a software contract for the City's 800 MHz EDACS Radio Trunking System manufactured by M/A-Com. **Gary Young, Deputy Fire Chief**

H. **PUBLIC HEARINGS/ACTION**

1. Public hearing, consideration and action on the adoption of a landscape irrigation ordinance. **Mike Morton, Chief Building Official**
2. Public hearing and action on an ordinance amending the 2009-10 fiscal year budget for the City of Copperas Cove. **Andrea M. Gardner, City Manager**

I. **ACTION ITEMS**

1. Consideration and action on authorizing the City Manager to execute a contract with Matous Construction for replacement of Weir/Butterfly Gates at the Northwest Wastewater Treatment Plant. **Robert McKinnon, Public Works Director.**
2. Consideration and possible action on authorizing the City Manager to execute an agreement for professional services with Bury and Partners Engineering Solutions for the golf course effluent project. **Danny Zincke, Director of Parks and Recreation**
3. Consideration and action on appointments to the City of Copperas Cove TIRZ Number One (Valley at Great Hills) Board Member Positions One through Four. **Andrea M. Gardner, City Manager**
4. Consideration and action on a resolution to authorize intervention at the Railroad Commission in Atmos Pipeline - Texas' request to increase rates for City-Gate and Pipeline Transportation Gas Service. **Andrea M. Gardner, City Manager .**
5. Consideration and action on 2011 Texas Coalition for Affordable Power (TCAP) Board Nominations. **Andrea M. Gardner, City Manager.**

J. **REPORTS FROM OUTSIDE ENTITIES, ADVISORY COMMITTEES AND BOARDS**

1. Presentation on Economic Development Projects by the Copperas Cove Economic Development Corporation. **Polo Enriquez, Executive Director**

K. **ITEMS FOR FUTURE AGENDAS**

L. **EXECUTIVE SESSION**

M. **RECONVENE INTO OPEN SESSION FOR POSSIBLE ACTION RESULTING FROM ANY
ITEMS POSTED AND LEGALLY DISCUSSED IN EXECUTIVE SESSION**

N. **ADJOURNMENT**

The City Council reserves the right to adjourn into Executive Session at any time regarding any issue on this agenda for which it is legally permissible.

City Hall is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to the meeting. Please contact the City Secretary at (254) 547-4221, (254) 547-6063 TTY, or FAX (254) 542-8927 for information or assistance.

I, the undersigned authority, do hereby certify that the above Notice of Meeting of the Governing Body of the City of Copperas Cove was posted at _____, October 29, 2010 on the glass front door of City Hall, a place convenient and readily accessible to the general public at all times.

Jane Lees, TRMC, CMC
City Secretary

Information

Subject

Employee Service Awards - November 2010. ***Andrea M. Gardner, City Manager***

- Desiree Mundell, Human Resources Coordinator - 5 years
 - Greg Hernandez, Golf Course Laborer - 10 years
-

City Council Regular

Item #: E. 2.

Date: 11/02/2010

Information

Subject

Proclamation: America Recycles Day. *John Hull, Mayor*

Attachments

Link: [America Recycles Day](#)



PROCLAMATION

WHEREAS, Americans are projected to generate nearly 253 million tons of municipal solid waste. While the nation has reached an overall recycling rate of 40-50% percent, much more can be done, especially in closing the loop and purchasing products made with recycled content; and

WHEREAS, to focus the nation's attention on the importance of recycling and closing the loop, businesses, industries, government agencies, nonprofit organizations, and individuals have joined together to celebrate America Recycles Day and are encouraging their employers, staff, customers, membership, and all citizens to pledge to buy more recycled-content products starting on November 15; and

WHEREAS, waste reduction and the purchase of recycled-content products are critically important elements of an environmentally responsible waste management program; and

WHEREAS, America Recycles Day is a national promotion to help raise awareness about recycling and buying recycled products; and

WHEREAS, recycling saves precious energy, conserves valuable natural resources, protects the environment, reduces landfill needs and has a positive economic impact; and

WHEREAS, participating in America Recycles Day 2010 is one way citizens can help raise awareness about the need to reduce waste by reusing, recycling, and buying recycled products; and

WHEREAS, the theme of America Recycles Day is "*I Recycle*"; and

WHEREAS, state and community leaders need to spread the word about the excellent recycling programs they have established, the growth of markets for recyclable materials, the importance of buying recycled products.

NOW, THEREFORE, I, John Hull Mayor of the City of Copperas Cove, Texas do hereby proclaim November 15, 2010 as:

"America Recycles Day"

in Copperas Cove, Texas, and urge all citizens to work together to help promote awareness to the importance of recycling.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the City of Copperas Cove to be affixed this 2nd day of November 2010.

John Hull, Mayor

ATTEST:

Jane Lees, City Secretary

Information

SUBJECT

Consideration and action on approving the minutes from the workshop council meeting of October 19, 2010. *Jane Lees, City Secretary*

BACKGROUND/HISTORY

FINDINGS/CURRENT ACTIVITY

ACTION OPTIONS/RECOMMENDATION

Attachments

Link: [10/19/10 Workshop Minutes](#)

**CITY OF COPPERAS COVE
CITY COUNCIL WORKSHOP MEETING MINUTES
October 19, 2010 – 6:00 P.M.**

A CALL TO ORDER

Mayor Hull called the meeting to order at 6:00 p.m.

B ROLL CALL

Present: John Hull
Cheryl L. Meredith
Charlie D. Youngs
Gary L. Kent
Kenn Smith
Jim Schmitz
Frank Seffrood

Absent: Danny Palmer

Attendees: Andrea M. Gardner
Charles E. Zech
Jane Lees

C WORKSHOP ITEMS

- 1 Presentation, recommendation and discussion from Chapter 3 Committee. ***Mike Heintzelman, Chair, Chapter 3 Committee and Animal Shelter Advisory Board***

Deputy Chief Heintzelman stated that the Chapter 3 Committee met approximately 12 times to discuss the proposal that was submitted for Council's review. An item by item review was conducted through Section 3-49. Discussion followed with Attorney Zech saying that he would have to research several items and get back with the Council with his recommended changes. Mr. Zech stated that several sections in the ordinance are already covered by the State Administrative Code and under State Law Cruelty to Animals. In addition, he stated that several of the proposed items were unenforceable and others were policy decisions for the Council to make.

- 2 Provide direction to the City Manager regarding agenda item C-1. ***Andrea M. Gardner, City Manager***

The Council did not finish reviewing all proposed changes and several items will need to be researched by the City Attorney. Due to time running out Mayor Hull ended the workshop.

D ADJOURNMENT

There being no further business, Mayor Hull adjourned the meeting at 6:57 p.m.

John Hull, Mayor

ATTEST:

Jane Lees, City Secretary

Information

SUBJECT

Consideration and action on approving the minutes from the regular council meeting on October 19, 2010. *Jane Lees, City Secretary*

BACKGROUND/HISTORY

FINDINGS/CURRENT ACTIVITY

ACTION OPTIONS/RECOMMENDATION

Attachments

Link: [10/19/10 Reg Minutes](#)

**CITY OF COPPERAS COVE
CITY COUNCIL REGULAR MEETING MINUTES
October 19, 2010 – 7:00 P.M.**

A CALL TO ORDER

Mayor Hull called the meeting to order at 7:05 p.m.

B INVOCATION AND PLEDGE OF ALLEGIANCE

Pastor Billy Sanders of North Pointe Church gave the invocation and Mayor Hull led the pledge of allegiance.

C ROLL CALL

Present: Cheryl L. Meredith
Charlie D. Youngs
Gary L. Kent
Kenn Smith
Jim Schmitz
Frank Seffrood
John Hull

Absent: Danny Palmer

Attendees: Andrea M. Gardner
Charles E. Zech
Jane Lees

D ANNOUNCEMENTS

Council Member Kent asked that parents to speak to their children about bullying, since the subject has been in the news a lot lately. He said that parents should try to be an example for their children and, above all, work to make sure that children have a safe environment.

E PUBLIC RECOGNITION

1 Proclamation: Lights On Afterschool. ***John Hull, Mayor***

Allison Shopbell, Branch Director, Boys & Girls Club of Copperas Cove, accepted the proclamation from Mayor Hull. She stated that the Club was open for 21 days in September and served a total of 2,004 children during that time. She thanked the Council for the proclamation and invited everyone to stop by to see them.

F CITIZENS FORUM - None.

- G **CONSENT AGENDA** – All matters listed under this item are considered to be routine by the City Council and will be enacted by one motion. There will not be separate discussion of these items. If discussion is desired, that item will be removed from the consent agenda and considered separately.
- 1 Consideration and action on approving minutes from the workshop council meeting of October 5, 2010. **Jane Lees, City Secretary**
 - 2 Consideration and action on approving minutes from the regular council meeting of October 5, 2010. **Jane Lees, City Secretary**
 - 3 Consideration and action on a resolution authorizing the City Manager to submit an application and agreement with the Electric Reliability Council of Texas, Inc. (ERCOT) for membership year 2011. **Andrea M. Gardner, City Manager**
 - 4 Consideration and action on approval of a resolution amending authorized TexSTAR representatives for the City of Copperas Cove, Texas. **Cynthia L. Taylor, Interim Assistant Director of Financial Services**
 - 5 Consideration and action on approval of a resolution amending authorized Texas Local Government Investment Pool (TexPool) representatives for the City of Copperas Cove, Texas. **Cynthia L. Taylor, Interim Assistant Director of Financial Services**
 - 6 Consideration and action authorizing City staff to apply for an Oncor City Smart Grant. **Bob McKinnon, Director of Public Works**
 - 7 Consideration and action on amendments to the bylaws for the Keep Copperas Cove Beautiful Commission. **Silvia Rhoads, Executive Director, Keep Copperas Cove Beautiful**
 - 8 Consideration and action on authorizing the City Manager to execute an Interlocal Government Joint Recycling Agreement with the Copperas Cove Independent School District. **Andrea M. Gardner, City Manager.**

Consent Agenda Vote:

Motion by Council Member Gary L. Kent Seconded by Council Member Kenn Smith

AYE: Council Member Cheryl L. Meredith
Council Member Charlie D. Youngs
Council Member Gary L. Kent
Council Member Kenn Smith
Council Member Jim Schmitz
Council Member Frank Seffrood

Passed

H **PUBLIC HEARINGS/ACTION - None.**

I **ACTION ITEMS**

- 1 Consideration and action on approval of the Copperas Cove Economic Development Corporation contract with T & R Fence. ***Polo Enriquez, Executive Director, Copperas Cove Economic Development Corporation***

Motion made to approve the contract as presented.

Motion by Council Member Cheryl L. Meredith Seconded by Council Member Frank Seffrood

AYE: Council Member Charlie D. Youngs
Council Member Frank Seffrood
Council Member Gary L. Kent
Council Member Cheryl L. Meredith
Council Member Jim Schmitz
Council Member Kenn Smith

Passed

- 2 Consideration and action on an ordinance amending Chapter 2, Article VI, Section 2-132 and Section 2-134 of the City's Code of Ordinances. ***Silvia Rhoads, Executive Director, Keep Copperas Cove Beautiful***

Motion made to approve the ordinance as presented.

ORDINANCE NO. 2010-47
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS
AMENDING: THE CITY OF COPPERAS COVE CODE OF ORDINANCES CHAPTER 2,
ARTICLE VI, SECTION 2-132; MEMBERSHIP; AND SECTION 2-134; RULES AND
PROCEDURES; MEETINGS; COMPENSATION.

Motion by Council Member Charlie D. Youngs Seconded by Council Member Gary L. Kent

AYE: Council Member Cheryl L. Meredith
Council Member Charlie D. Youngs
Council Member Gary L. Kent
Council Member Kenn Smith
Council Member Jim Schmitz
Council Member Frank Seffrood

Passed

- 3 Consideration and action on Change Order #1 to engineering design contract for Bradford Drive Improvements with Hearn Engineering. ***Wesley Wright, P.C., City Engineer***

Motion made to approve Change Order #1 to the contract as presented.

Motion by Council Member Gary L. Kent Seconded by Council Member Cheryl L. Meredith

AYE: Council Member Cheryl L. Meredith
Council Member Charlie D. Youngs
Council Member Gary L. Kent

Council Member Kenn Smith
Council Member Jim Schmitz
Council Member Frank Seffrood

Passed

- 4 Consideration and action on a resolution supporting the execution of an Advanced Funding Agreement between the Texas Department of Transportation and the City of Copperas Cove for the completion of the Southeast Bypass project. **Andrea M. Gardner, City Manager**

Motion made to approve the resolution as presented.

RESOLUTION NO. 2010-41

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS, SUPPORTING THE EXECUTION OF AN ADVANCED FUNDING AGREEMENT BETWEEN THE TEXAS DEPARTMENT OF TRANSPORTATION AND THE CITY OF COPPERAS COVE, AND AUTHORIZING THE CITY MANAGER TO ACT ON THE CITY'S BEHALF TO NEGOTIATE THE TERMS OF THE AGREEMENT PRIOR TO FINAL APPROVAL BY THE CITY, AND PLEDGING THAT THE CITY OF COPPERAS COVE WILL COMPLY WITH THE AGREEMENT REQUIREMENTS OF THE TEXAS DEPARTMENT OF TRANSPORTATION.

Motion by Council Member Cheryl L. Meredith Seconded by Council Member Kenn Smith

AYE: Council Member Frank Seffrood
Council Member Gary L. Kent
Council Member Charlie D. Youngs
Council Member Cheryl L. Meredith
Council Member Jim Schmitz
Council Member Kenn Smith

Passed

- K **REPORTS FROM OUTSIDE ENTITIES, ADVISORY COMMITTEES AND BOARDS - None.**

- L **ITEMS FOR FUTURE AGENDAS**

Council Member Schmidt said that he would be absent from the first regular meeting in November.

- M **EXECUTIVE SESSION - None.**

- N **RECONVENE INTO OPEN SESSION FOR POSSIBLE ACTION RESULTING FROM ANY ITEMS POSTED AND LEGALLY DISCUSSED IN EXECUTIVE SESSION**

- O **ADJOURNMENT**

There being no further business, Mayor Hull adjourned the meeting at 7:30 p.m.

ATTEST:

John Hull, Mayor

Jane Lees, City Secretary

Date: 11/02/2010

Contact: Brian Hawkins, PARD Administrative Assistant ,
Parks & Recreation

Information

SUBJECT

Consideration and action on authorizing the City Manager to enter into an agreement with Central Counties Center for MHMR (Mental Health and Mental Retardation) Services to occupy a designated area of the Human Resource Center for a period of two years with an option to renew one additional year. ***Brian Hawkins, Recreation Specialist/Administrative Assistant of Parks and Recreation***

BACKGROUND/HISTORY

Central Counties Center for MHMR Services has occupied a portion of the Human Resource Center for several years. The current agreement expired September 30, 2010.

FINDINGS/CURRENT ACTIVITY

The agency provides services for individuals in the area that are mentally handicapped and/or mentally retarded. The agreement allows MHMR to continue using the Human Resources Center for providing activities. The agreement has been reviewed by City staff, MHMR staff and the City attorney.

ACTION OPTIONS/RECOMMENDATION

City staff recommends City Council authorize the City Manager to enter into an agreement with Central Counties Center for MHMR Services to occupy a designated area of the Human Resource Center.

Fiscal Impact

FINANCIAL IMPACT:

In this agreement Central Counties Center for MHMR Services has agreed to pay the City \$2400/year for maintenance and landscaping of the Human Resource Center.

Attachments

Link: [MHMR Agreement](#)

THE STATE OF TEXAS *

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF CORYELL *

AGREEMENT

This agreement is made and entered into this the 1st day of October, 2010 by and between the City of Copperas Cove, a home-rule municipality (hereinafter referred to as "City") and the Central Counties Center for MHMR services (hereinafter referred to as "Agency").

WHEREAS, the City and Agency mutually agree that space is needed for social service agencies providing services to citizens of Copperas Cove;

WHEREAS, the City owns the Human Resource Center, 1012 North Drive, which has adequate space to house several agencies;

WHEREAS, Agency has the personnel and knowledge to provide specific services to the community;

WHEREAS, the City Council finds that providing quality social services for pre-school, youth, adult, senior citizens and those people with special needs are essential for the well-being and growth of the community;

NOW, THEREFORE, the City and Agency hereby agree as follows:

1. The City agrees to provide no less than 4400 square feet of floor space in the Human Resource Center for a period of 2 years from the date of the agreement.
2. Agency agrees to establish and operate Community programs for the Copperas Cove area in a portion of the Human Resource Center owned by the City of Copperas Cove located at 1012 North Drive, Copperas Cove, Texas.
3. Agency agrees to maintain their portion of the building to include, but not limited to, meeting all current federal and state building codes and licensing requirements. Agency shall assume responsibility for all maintenance, repairs, replacement, and upkeep, including furnishings, air conditioning and heating units, appliances and supplies. No modifications or renovations shall be undertaken by Agency without written consent of the City of Copperas Cove. Any and all work must meet or exceed all local, state and federal codes including ADA specifications. The City reserves the right of final approval prior to the start of any work. The City will bear no additional costs in connection with the Agency's use of space.

4. Agency shall be responsible for payment of all utility bills for the portion of the building that is occupied by Agency.
5. City shall maintain the grounds surrounding the Human Resource Center and Agency shall pay \$2400/year for maintenance and landscaping of the Human Resource Building.
6. City agrees that Agency shall have the exclusive use, occupancy, and right to operate programs and the overall supervision of these programs at the designated site.
7. City shall provide fire insurance on the building.
8. Agency shall provide comprehensive and liability insurance with the City of Copperas Cove as co-insured.
9. This agreement shall continue in full force and effect for a period of two years from the date hereof and so long as the parties might agree provided, however, that in the event Agency fails to establish or continue to operate programs acceptable to the City Council of Copperas Cove, then the Council shall have the option of immediately terminating this agreement. In the event the building is destroyed or damaged by fire, storm, or other acts of God and/or other causes, the City has no responsibility beyond timely repair or replacement of the building as provided by insurance coverage.
10. Binding Effect. All of the terms, covenants, and conditions contained within this agreement shall apply to, bind, insure to the benefit of, and be exercised by the parties hereto and their respective heirs, executors, administrators, successors in interest and assigns, except as otherwise expressly provided herein.
11. Amendments. Both parties agreed that no amendment, modification or alteration of the terms of this agreement shall be binding unless reduced to writing, dated subsequent to the date of this agreement, and duly executed by the parties hereto.
12. Notices. Notices given pursuant to the provisions of this agreement, or necessary to carry out its provisions, shall be in writing, and delivered personally to the person to whom the notice is to be given, or given by certified or registered mail and return receipt requested, addressed to the proper party. The parties' addresses for this purpose are as follows:

City of Copperas Cove
Attn: Andrea Gardner, City Manager
P.O. Drawer 1449
Copperas Cove, TX 76522

Central Counties Center for MHMR Services
Attn: Executive Director
304 S. 22nd Street
Temple, TX 76501

13. Governing law and venue. The parties hereto agree that the laws of the State of Texas shall govern the interpretation, validity, performance, and enforcement of this agreement. Venue for any action involving this agreement shall be in the courts of Coryell County, Texas.
14. Severability. Each and every covenant and obligation contained in this agreement is and shall be construed to be a separate and independent covenant and obligation. If any term or provision of this agreement, or its application to any person or circumstances shall to any extent be held invalid, illegal or unenforceable, the remainder of this agreement shall not be affected thereby, and each and every other term and provision shall be enforced to the fullest extent permitted by law as if the invalid, illegal, or unenforceable provision had never been included in this agreement.
15. Construction and Interpretation. Each party has carefully read this entire agreement, and understands the meaning and effect of each and every provision contained herein. Each party executes this Agreement freely and voluntarily, and only after first having obtained (or having had a reasonable opportunity to obtain) competent legal advice. The parties thus agree that the construction and interpretation of the terms of this lease the rule of construction that a document is to be construed most strictly against the party who prepared the same shall not be applied, it being agreed that the agreement should be construed fairly and simply and not strictly against either party.
16. Time is of the essence. The parties agree that time is of the essence in the performance of this Agreement.
17. Independent Contractor. It is expressly understood and agreed that the employees, servants and agents of the Agency are not employees, servants or agents of the City and that Agency is deemed and independent contractor and the City is in no way responsible for the negligent and intentional acts or omissions of the Agency, its employees, officers, volunteers, servants, agents, licensees or invitees.
18. Authorized signatures. The persons signing this Agreement on behalf of the parties hereto certify that they are duly authorized to sign this Agreement on behalf of said parties.
19. Compliance with Laws. The parties hereto mutually agree to comply with all applicable federal, state and local laws, ordinances, rules and regulations in performance of their obligation pursuant to this Agreement.
20. Discrimination Prohibited. The parties hereto mutually agree to adhere to all federal, state and local laws and regulations prohibiting discrimination. The parties agree that they shall not discriminate against a participant in any of the programs described above because of race, color, religion,

national origin, sex, sexual preferences, sexual orientation, height, weight or beliefs.

IN WITNESS WHEREOF, the parties have fully executed this Agreement on this the _____ day of _____, 2010.

City of Copperas Cove

Agency

By: _____
Andrea Gardner, City Manager

By: _____
Eldon Tietje

Attest:

Jane Lees, City Secretary

Date: 11/02/2010

Contact: Gary Young, Deputy Fire Chief

Information

SUBJECT

Consideration and action on authorizing the City Manager to execute a Sales Contract between the City of Copperas Cove and Dailey-Wells Communications, Inc. for the purpose of renewing a maintenance contract and renewing a software contract for the City's 800 MHz EDACS Radio Trunking System manufactured by M/A-Com. **Gary Young, Deputy Fire Chief**

BACKGROUND/HISTORY

The City purchased a complete 800 MHz radio system December 2, 2003. The radio system consisted of a transmitter site on Freedom Lane and a total of 345 terminal units (portable, mobile and control station radios). City departments utilize the radio system on a daily basis for the operations. The radio system and radios require annual maintenance and repair to ensure proper operation. Since the initial purchase of the radio system more than 450 maintenance/repair entries have been logged. The repairs range from replacement of missing knobs up to replacement of complete system operating boards. The maintenance contract provides onsite and in house service for our radio system. Although portable and mobile radios can be sent to San Antonio for service, the radio tower site and dispatch facility require a technician to come to Copperas Cove to perform the work. The radio system also requires timely software upgrades to ensure reliable operation internally as well as with the backbone tie to the Bell County Radio system. The radio system is the primary communication system used for 911 responses to calls for service by Fire, EMS and Police.

FINDINGS/CURRENT ACTIVITY

Attached is the annual renewal for the radio maintenance contract, software upgrades and console replacement.

The maintenance contract, software upgrade and console replacement submitted by Dailey-Wells to the City provides:

- Infrastructure Maintenance on site with a response commensurate with the service needed.
- Terminal Maintenance for portables, mobiles and control station performed at the service center in San Antonio.
- Annual Software Service for Radio Programming software.
- Infrastructure Software upgrades

The maintenance contract submitted by Dailey-Wells to the City does NOT provide:

- Service for any buildings, generators, antennas, batteries, speaker microphones, accessories or mobile radio microphones.

Many infrastructure items that would be covered under the Maintenance Agreement can be extremely expensive to replace, some items can be more than \$90,000 to replace should failure occur.

ACTION OPTIONS/RECOMMENDATION

City staff recommends that the City Council authorize the City Manager to execute a contract for services, in the amount of \$72,284 between the City of Copperas Cove and Dailey-Wells Communications, Inc. for the purpose of renewing a radio system maintenance contract for specified Infrastructure Maintenance, Terminal Maintenance and Programming Software, Infrastructure Software for the City's 800 MHz Radio System manufactured by M/A-Com.

Fiscal Impact

Funds available Y/N?: Yes

FINANCIAL IMPACT:

The total cost of the proposed 800 MHz radio system maintenance contract renewal and software updates from Dailey-Wells is \$72,284. The City has budgeted \$72,716 for the maintenance of the radio system. The cost of the listed services is shared by all departments that utilize the radio system. Please see the included attachment for breakdown by department. Funding for the project has been secured in the 2010-2011 Annual Budget previously approved by City Council.

Attachments

Link: [Service Contract](#)

Link: [Pricing Quote](#)

Link: [Cost Per Department](#)

SOW for Maintenance Services
City of Copperas Cove 800 MHz Communications System
(Software FX Services Purchased Separately)

This Statement of Work outlines the services and materials that Dailey & Wells Communications will provide to the City of Copperas Cove regarding the maintenance of the Cities 800 MHz Trunked Communications System. Copperas Cove must purchase software FX services from Dailey-Wells Communications prior to this agreement being fully executed.

Summary

This maintenance contract will be in effect from 1 October, 2010 through 30 September, 2011. Infrastructure maintenance services include Monday through Friday 8 a.m. to 5 p.m. for "Routine Outages" (Minor) and 24x7 support for "System Outages" (Major), travel time, labor and standard parts. Terminal maintenance which includes mobiles, portables and desktop control stations, will be performed at our San Antonio Service Center depot repair and includes shop labor and parts. Annual software service for radio programmer is included with the software FX agreement. System software updated provided under the software FX agreement are provided twice a year. The total value of this contract is \$45,284.00, invoiced annually in advance.

Dailey & Wells Responsibilities-

Respond within 4-6 hours of any minor or major infrastructure outages. The first response will be provided via telephone and a resolution will try to be worked out with the customer and responding technician over the phone. This will also be used as a triage by the technician to help determine parts that may be required for repair. If an outage can not be resolved over the phone then the customer and the responding technician will determine need and urgency for the technician to be on site. Based on this the technician will respond accordingly. Provide the City with an 800 toll free phone number to report any outages. Repair all terminal units received from the city at the San Antonio Service Center in a timely manner and return the units at DWC expense. Assist the City with the installation and testing of software updates provided under the software FX agreement. Schedule a general inspection of the primary radio system tower during the maintenance contract period.

Customers Responsibilities

Provide Dailey & Wells Communications Technical Staff access to all system sites and equipment locations in a timely manner. Provide Dailey & Wells Communications Technical Staff assistance over the phone in troubleshooting and isolation of problems. Provide a POC from the City that will be responsible to verify and approve any work performed by Dailey & Wells Communications regarding this contract. Ship defective terminal units to the Dailey & Wells Service Center in a timely manner at the Cities expense.

Equipment Covered

Only equipment purchased from Dailey & Wells Communications as part of the Cities 800 MHz Trunked Communications System will be covered under this contract. This includes all radio equipment, power systems, microwave radios, T1 multiplexers, system switch and consoles utilizing Windows XP or higher CPU's.

Items Not Covered

Equipment sites, structures, towers and associated equipment (Generators, HVAC, Propane, Electrical, Lights...) will be maintained by and is the responsibility of the City. Portable radio batteries, speaker mic, antennas and accessories along with mobile microphone, and antennas. All fixed location antenna systems and consoles utilizing Windows NT CPU's. Should any equipment be discontinued by the manufacturer, Dailey & Wells Communications is not responsible to repair or replace the discontinued item. Dailey & Wells Communications will attempt to perform repairs pending available parts. Replacement of discontinued equipment is the responsibility of Copperas Cove.

Dailey & Wells Communications failure to perform any term or condition of this Agreement as a result of conditions beyond its control such as, but not limited to, war, strikes, fires, floods, acts of God, governmental restrictions, power failures, or damage or destruction of any network facilities or servers, shall not be deemed a breach of this Agreement.

Any damages that occur based on the above listed items and / or deemed abuse or non standard wear and tear will not be covered under the terms of this agreement. Repairs for these types of damages can be completed on a case by case basis and will be billed back to the customer at the Dailey & Wells Communications prevailing rates.

The laws of The State of Texas shall govern the validity, performance and all matters related to the interpretation and effect of this agreement, and any amendment thereto. A court presiding in Coryell County, Texas shall resolve all legal actions by or against either party.

IN WITNESS WHEREOF, The City of Copperas Cove Texas and Dailey-Wells Communications, Inc. have executed this agreement.

The City of Copperas Cove, Texas

Dailey-Wells Communications, Inc.

By: _____

By: _____

Title _____

Title: _____

Date: ____ / ____ / ____

Date: ____ / ____ / ____

DAILEY-WELLS COMMUNICATIONS

3440 E. Houston St. San Antonio, TX 78219

To: Copperas Cove, Gary Young

From: Jim Sawyer (210) 893-6701

Date: April 29, 2010



Radio System Maintenance - Period Oct. 1, 2010 - Sept. 30, 2011

PART DESCRIPTION	PART NUMBER	Qty.	UNIT LIST	DISC. %	UNIT SALE	EXT. SALE
Maintenance, 800 MHz Communications System, Annual	SYSMINTCC	1	\$ 45,284.00	0%	\$ 45,284.00	\$ 45,284.00
					TOTAL	\$ 45,284.00

See SOW for contract details.

Price valid until September 30, 2010.

Terms: Net 30 Days

DAILEY-WELLS COMMUNICATIONS

3440 E. Houston St. San Antonio, TX 78219

To: Copperas Cove, Gary Young

From: Jim Sawyer (210) 893-6701

Date: April 29, 2010



Software FX Agreement - Annual

PART DESCRIPTION	PART NUMBER	Qty.	UNIT LIST	DISC. %	UNIT SALE	EXT. SALE
Service, Software, Annual, Level 2 Single Site with Dispatch	SSSV1C	1	\$ 30,000.00	10%	\$ 27,000.00	\$ 27,000.00
					TOTAL	\$ 27,000.00

Price valid until September 30, 2010.

Terms: Net 30 Days

Priviledged Lien Calculation

Address: 1005 Craig Street

Demand Letter *(date sent)*
Contract Labor *(date)*

Administration Fee

Total Amount Due (Prior to Lien)

\$75.00
\$150.00
\$225.00

Priviledged Lien

Instrument Number: 213838

Amount Due (Original Amount Due)

Lien Assesment Fee

Total of Amount Due and Lien Assesment Fee

Interest (Ten (10) percent per annum)

No changes

\$225.00
\$50.00
\$275.00

year 1	<u>\$275.00</u>	/	<u>365</u>	days =	<u>\$0.75</u>	x	10% x	<u>365</u>	days =	<u>\$302.50</u>
year 2	<u>\$302.50</u>	/	<u>365</u>	days =	<u>\$0.83</u>	x	10% x	<u>365</u>	days =	<u>\$332.75</u>
year 3	<u>\$332.75</u>	/	<u>365</u>	days =	<u>\$0.91</u>	x	10% x	<u>359</u>	days =	<u>\$365.48</u>
year 4	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 5	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 6	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 7	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 8	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 9	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>
year 10	<u>\$365.48</u>	/	<u>365</u>	days =	<u>\$1.00</u>	x	10% x		days =	<u>\$365.48</u>

Total Amount Due to City

365.48

Radio System Maintenance Cost Breakdown by Department

Account	Department	# of radios	% of Responsibility	Cost Per Department
01-4230-4300-4400	Animal Control	5	1.46%	\$1,053.70
02-4210-5200-4400	Building	3	0.87%	\$632.22
01-4120-2200-4400	City Manager/ACM	1	0.29%	\$210.74
01-4330-7200-4400	Code Enforcement	3	0.87%	\$632.22
02-4425-8401-4400	Compost	1	0.29%	\$210.74
05-4410-7600-4400	Drainage	10	2.92%	\$2,107.41
01-4240-4420-4400	Emergency Management	1	0.29%	\$210.74
01-4170-5100-4400	Engineer	2	0.58%	\$421.48
02-4425-8000-4400	Public Works EOC Desktop	2	0.58%	\$421.48
01-4510-5700-4400	Facility Maint	3	0.87%	\$632.22
01-4140-3400-4400	Risk Manager	1	0.29%	\$210.74
01-4240-4400-4400	Fire	92	26.82%	\$19,388.13
09-4310-7402-4400	Golf	8	2.33%	\$1,685.92
01-4320-7100-4400	Library	2	0.58%	\$421.48
55-4220-4103-4400	Municipal Court	1	0.29%	\$210.74
01-4190-7500-4400	<i>NON Department Unassigned 9 Radios</i>		0.00%	\$0.00
01-4310-5400-4400	Parks	19	5.54%	\$4,004.07
01-4230-4200-4400	Police	110	32.07%	\$23,181.46
01-4410-5300-4400	PW Director	2	0.58%	\$421.48
02-4425-8300-4400	Sewer	15	4.37%	\$3,161.11
03-4430-9500-4400	Solid Waste	25	7.29%	\$5,268.51
01-4410-5300-4400	Streets	17	4.96%	\$3,582.59
02-4425-8100-4400	Utilities	9	2.62%	\$1,896.66
02-4425-8400-4400	Waste Water	1	0.29%	\$210.74
02-4425-8200-4400	Water	10	2.92%	\$2,107.41
Totals		343	100.00%	\$72,284.00

Actual
Cost
\$72,284.00
Type of Cost:
Radio Maintenance
Software Maintenance
FY 2010-2011

Cost Share Per Radio 0.29%

City Council Regular

Item #: H. 1.

Date: 11/02/2010

Contact: Mike Morton, Chief Building Official,
Building Department

Information

SUBJECT

Public hearing, consideration and action on the adoption of a landscape irrigation ordinance. **Mike Morton, Chief Building Official**

BACKGROUND/HISTORY

During the 80th Legislative Session of the State of Texas, the commission was required to adopt by rule and enforce standards governing the connection of irrigations systems to any water supply. **House Bill 4, House Bill 1656 and Senate Bill 3.**

FINDINGS/CURRENT ACTIVITY

After completing a review of the attached House and Senate bills that pertain to irrigation systems, City staff recommends the adoption of the landscape irrigation ordinance. **House Bill 4, House Bill 1656 and Senate Bill 3.**

ACTION OPTIONS/RECOMMENDATION

Hold a Public Hearing and provide direction to the City Manager regarding the Landscape Irrigation Ordinance.

Fiscal Impact

FINANCIAL IMPACT:

None

Attachments

Link: [Ordinance 2010-48](#)

Link: [Landscape Irrigation Draft](#)

Link: [House Bill 4](#)

Link: [House Bill 1656](#)

Link: [Senate Bill 3](#)

Link: [Chapter 344](#)

ORDINANCE NO. 48

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS, AMENDING THE CITY'S CODE OF ORDINANCES TO PROVIDE FOR LANDSCAPE IRRIGATION SYSTEMS REGULATION; PROVIDING A SAVINGS CLAUSE AND FOR THE REPEAL OF ALL OTHER ORDINANCES IN CONFLICT HERewith; PROVIDING FOR SEVERABILITY; PROVIDING A PENALTY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Copperas Cove allows the reasonable and responsible development and improvement of land within the City; and

WHEREAS, it is determined by the City Council of Copperas Cove that it is beneficial to the public health, safety, and welfare to amend the irrigation regulations within the City; and,

WHEREAS, the amendments will enhance the quality of life and the general welfare of the City.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS, THAT:

**SECTION 1.
Code of Ordinances Amended**

The City Council of the City of Copperas Cove hereby amends the City's Code of Ordinances Chapter 4, Article 5, Landscape Irrigation Systems is amended as reflected in the attached Exhibit "A".

**SECTION 2.
INCORPORATION**

That the above and foregoing premises are true and correct and are incorporated herein and made part hereof for all purposes.

**SECTION 3.
INVALIDITY OF A PART**

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance; and

**SECTION 4.
REPEAL**

All ordinances or parts of ordinances in conflict with any of the provisions of this ordinance are hereby repealed insofar as the same is in conflict with the provisions hereof; and

**SECTION 5.
EFFECTIVE DATE**

This Ordinance shall be effective upon the approval of the City Council of the City of Copperas Cove, Texas and publication pursuant to law.

PASSED AND APPROVED this 2nd day of November 2010.

SIGNED:

John A. Hull, Mayor

ATTEST:

Jane Lees, City Secretary

APPROVED AS TO FORM:

Denton, Navarro, Rocha and Bernal, P.C.
City Attorney's Office

EXHIBIT A

ARTICLE V LANDSCAPE IRRIGATION SYSTEMS

GENERAL PROVISIONS

Section 4-150

Title

This Chapter of the Code of the City of Copperas Cove is hereby designated and shall be known and referred to as the Irrigation Chapter of the City Code of Ordinances.

Section 4-151

Purpose

The purpose of this chapter is to protect the public health, safety and welfare of Copperas Cove citizens by regulating the installation, maintenance, operation and repair of irrigation systems within the corporate limits of the City as well as the City's extraterritorial jurisdiction to conserve water, avoid wasteful use, and improve the overall quality of life for the citizens of Copperas Cove. The provisions in this chapter are cumulative of all City ordinances. In the event of a conflict, the more stringent provision shall apply.

Section 4-152

Adoption of Texas Commission on Environmental Quality Chapter 344 Relating to Landscape Irrigation

Chapter 344 of Title 30 of the Texas Administrative Code, as amended, is hereby adopted as if set out word for word in this chapter. In the event of conflict or inconsistency in the wording of this chapter and Chapter 344 of Title 30 of the Texas Administrative Code, the more stringent provision shall apply.

Section 4-153

Applicability

The provisions of this chapter shall apply to the installation, alteration, repair, relocation, and replacement, in addition to, use or maintenance of irrigation systems within the City and the City's extraterritorial jurisdiction and this chapter shall regulate the installation of backflow prevention devices, control valves, irrigation controllers, control wiring, and water conservation practices required for proper design, installation and operation of irrigation systems. Exceptions to this chapter are:

1. a landscape irrigation system that is an on-site sewage disposal system, as defined by Section 366.002 of the Texas Health and Safety Code;
2. an irrigation system that is used on or by an agricultural operation as defined by Section 251.002 of the Texas Agriculture Code; and
3. an irrigation system that is connected to a groundwater well used by the property owner for domestic use.

Sections (4-154 thru 4-159) reserved

DEFINITIONS

Section 4-160 Definitions

Unless otherwise expressly stated or clearly indicated by the context, the following terms shall, for the purpose of this chapter, have the meanings indicated in this section.

“Air gap” means a complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

“Atmospheric Vacuum Breaker” means an assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Atmospheric Vacuum Breaker is also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.

“Automatic controller” means a solid state timer capable of operating valve stations to set the days, time of day, and length of time water is applied.

“Backflow prevention” means the mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

“Backflow prevention assembly” means any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

“Building Official” means the Building Official or designated representative.

“City” means the City of Copperas Cove, Texas.

“City Code” means the Code of Ordinances of the City of Copperas Cove, Texas,

“Completion of irrigation system installation” means when the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

“Consulting” means the act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

“Cross-connection” means actual or potential connection between a potable water source and an irrigation system that may contain contaminants or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

“Design” means the act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

“Design pressure” means the pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

“Double Check Valve” means an assembly that is composed of two independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Double Check Valve is also known as a Double Check Valve Backflow Prevention Assembly.

“Emission device” means any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

“Employed” means engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code

Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

“Head-to-head spacing” means the spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

“Health hazard” means a cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

“Hydraulics” means the science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

Inspector” means a licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector designated by the Regulatory Authority to inspect irrigation systems and perform other enforcement duties for the City as an employee or as a contractor.

“Installer” means a person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

“Irrigation Inspector” means a person who has been designated by the Regulatory Authority to inspect irrigation systems and perform other enforcement duties for the City as an employee or as a contractor. Such person is required to be licensed under Chapter 30 of Title 30 of the Texas Administrative Code (relating to Occupational Licenses and Registrations).

“Irrigation plan” means a scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

“Irrigation services” mean selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

“Irrigation system” means an assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.

“Irrigation technician” means a person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

“Irrigation zone” means a subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

“Irrigator” means a person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30.

“Irrigator-in-Charge” means the irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

“Isolation valve” means a valve that is installed between the water meter and the backflow prevention device.

“Landscape irrigation” means the science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

“License” means an occupational license that is issued by the Texas Commission on Environmental Quality under Title 30, Texas Administrative Code, Chapter 30, to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

“Mainline” means a pipe within an irrigation system that delivers water from the water source to the individual zone valves.

“Maintenance checklist” means a document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the City of Copperas Cove Water Utilities Department, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the North Central Texas geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

“Major maintenance, alteration, repair, or service” means any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a mainline, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

“Master valve” means a remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

“Matched precipitation rate” means the condition in which all sprinkler heads within an irrigation zone apply water at the same rate. “New installation” means an irrigation system installed at a location where one did not previously exist.

“Non-health hazard” means a cross connection or potential cross connection from a landscape irrigation system that involves any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.

“Non-potable water” means water that is not suitable for human consumption. Non-potable water sources included, but are not limited to, irrigation systems, lakes, ponds, streams, gray water that is discharged from washing machines, dishwashers or other appliances, water vapor condensate from cooling towers, reclaimed water, and harvested rainwater.

“Pass-through contract” means a written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.

“Person” means any natural Person, association of Persons, partnership, corporation, agent or officer, or other entity.

“Potable water” means water that is suitable for human consumption.

“Pressure Vacuum Breaker” means an assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Pressure Vacuum Breaker is also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

“Reclaimed water” means domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

“Records of landscape irrigation activities” means the irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

“Reduced Pressure Principle Backflow Prevention Assembly” means an assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

“Regulatory Authority” shall be a license plumbing inspector or a license irrigation inspector.

“Static water pressure” means the pressure of water when it is not moving.

“Supervision” means the on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Supervision also means a licensed installer working under the direction of a licensed irrigator or beginning January 1, 2009, an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

“Turfgrass” means grass that, when regularly mowed, forms a dense growth of leaf blades and roots.

“Water conservation” means the design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

“Zone flow” means a measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

“Zone valve” means an automatic valve that controls a single zone of a landscape irrigation system.

LICENSE, PERMIT, INSPECTIONS AND FEES

Section 4-161 License Required

A. No person shall connect an irrigation system to any water supply within the City or the City’s extraterritorial jurisdiction unless that person holds a valid license, as defined by Chapter 30 of Title 30 of the Texas Administrative Code and required by Chapter 1903 of the Texas Occupations Code or as defined by Chapter 365 of Title 22 of the Texas Administrative Code and required by Chapter 1301 of the Texas Occupations Code except for the below stated exemptions.

B. A property owner is exempt from this chapter’s requirement to be licensed if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person’s home. This exemption is only from this chapter’s license requirement and is not an exemption from the other provisions in this chapter.

C. In accordance with Section 1903.002 of the Texas Occupation Code, a person who is licensed by the Texas State Board of Plumbing is exempt from this chapter’s requirement to be licensed. This exemption is only from this chapter’s license requirement and is not an exemption from the other provisions in this chapter.

D. In accordance with Section 1903.002 of the Texas Occupation Code, a person who is a licensed engineer, registered architect, or registered landscape architect to the extent the person’s acts are incidental to the pursuit of

the person's profession is exempt from this chapter's requirement to be licensed. This exemption is only from this chapter's license requirement and is not an exemption from the other provisions in this chapter.

Section 4-162 Permit and Registration Required

A. Permit Required. No person shall install a new irrigation system or add zones and/or heads to an existing irrigation system within the territorial limits or extraterritorial jurisdiction of the City without obtaining a permit from the City.

B. Permit Application. A person shall submit an application for a permit on a form prescribed by the Regulatory Authority, the irrigation plan, and the permit fee to the Regulatory Authority. If the permit fee is paid and the irrigation plan complies with the requirements of this chapter, the Regulatory Authority shall issue a permit. Otherwise, the Regulatory Authority shall deny the application.

C. Registration Required. It shall be unlawful for any person, business, firm, or corporation to perform, or cause to be performed, any work described in this Code as requiring a permit unless such person, firm or corporation is the holder of a valid registration with the City to perform such work. Such person, firm or corporation shall be herein termed Registrant. In extending the rights and privileges of such registration, the City makes no statement of the technical competency of those so registered, and no manner of license is proffered.

D. Information to be Provided. An applicant for registration under this section shall provide to the Building Official the following information:

1. The complete name, complete mailing address and telephone number of the firm or corporation.
2. The name and private mailing address of a principal of the firm or corporation who is a person authorized to bind the firm or corporation in legal agreements.
3. The name and license identification of the licensed individual through whom the person, firm or corporation is to be represented in all activities before the Building Official.
4. Other pertinent information deemed necessary by the Building Official.

E. Every Registrant doing work in any City rights-of-way shall carry Contractor's Public Liability Insurance with a combined single limit of not less than \$500,000 per occurrence, with an aggregate of not less than \$500,000. The Registrant shall make the City of Copperas Cove a Certificate Holder and present proof of insurance at the time of registration and all subsequent renewals. Notice of policy cancellations or failure to renew coverage shall be cause for revocation of registration, denial of inspections or cancellation of permits.

F. Transfer of Registration Prohibited. No Registrant under this Section shall allow his registration, by name or other identification, to be transferred or assigned to, or in any manner directly or indirectly used by, any person, firm or corporation other than the one to whom issued by the Building Official, for any purpose.

G. Exemption for Homeowner. These registration requirements shall not apply to work to be performed on a residential structure when the person performing the work is the owner of the structure, and has his legal residence there, and is not assisted by any other person for remuneration. The homeowner shall be automatically considered a Registrant for the purposes of such a project. Notwithstanding such relief from registration, all requirements for permits for the work shall remain in force.

H. Expiration and Renewal of Business Registration. Registration shall expire annually and shall be routinely reactivated by payment of a renewal fee if application information remains accurate. A registration may be renewed, as herein provided, at any time from sixty (60) days preceding the date of expiration. A registration not renewed for ninety (90) days beyond the date of expiration shall require a new registration.

I. Registration Suspended. The Regulatory Authority shall have the authority to suspend any registration issued under this Code for the following reasons:

1. Forfeiting an appeal of a Stop Order by allowing work to continue on a project after the issuance of said Stop Order.

2. Forfeiting an appeal from the Regulatory Authority by initiating work or allowing another to initiate work in violation of the Regulatory Authority's decision or prior to the Regulatory Authority's decision.

3. Causing or permitting the unauthorized or prohibited use of a valid registration, by Registrant or another, such as to allow the rights and privileges of registration to be applied to one not duly registered.

4. Convictions of two (2) violations of any of the provisions of this Code or of Section 14 of Article 6243-101, V.T.C.S., committed within a period of twelve (12) consecutive months (except that remedy of the violation within twenty (20) days of notice of violation shall cause the waiver of such conviction for the purpose of this subsection).

5. Providing false information on business registration and/or permit applications.

6. Failure to request inspections as required by this Chapter.

K. Permit Application Expiration and Renewals.

1. After issuing a permit, the Regulatory Authority shall remain empowered to require the correction of errors in plans and specifications; and prevent the commencement or continuation of construction operations conducted under such plans and specifications when such operations are in violation of this Chapter or other ordinance.

2. Every permit issued under this Chapter shall expire by limitation and become null and void if the work is suspended or abandoned for a period of one hundred eighty (180) days.

3. Any permittee holding an unexpired permit may apply in writing for an extension of the time within which work may commence under that permit. The Building Official may extend the time for action by the permittee for a period not exceeding one hundred eighty (180) days. The permittee shall pay a fee for the extension of the unexpired permit. No permit shall be extended more than once.

4. When a permit expires under this subsection, work may be recommenced only upon the issuance of a new permit.

5. An application for which no permit is issued within one hundred eighty (180) days following the date of the application shall be voided due to limitation of time and plans submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action on the application for an additional one hundred eighty (180) days upon a request in writing submitted to the Building Official and payment of the extension fee. No application shall be extended more than once. An expired application may only be reactivated by filing of a new application including plans and fees.

L. Right of Entry. Whenever it is necessary to make an inspection to enforce the provisions of this chapter, or whenever the Regulatory Authority has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this chapter that make the building or premises unsafe, unsanitary, dangerous or hazardous, the Regulatory Authority shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the Regulatory Authority by this chapter. If such building or premises is occupied, the Regulatory Authority shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the Regulatory Authority shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, the Regulatory Authority shall have recourse to every remedy provided by law to secure entry. When the Regulatory Authority shall have first obtained a proper inspection warrant pursuant to the "Municipal Court" Chapter of the Code of the City of Copperas Cove no owner or occupant or person having charge, care or control of

any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Regulatory Authority.

M. Stop Work Orders. Upon notice from the Regulatory Authority, work on any irrigation system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Regulatory Authority shall not be required to give a written notice prior to stopping the work. No person shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition.

Section 4-163 Required Inspections

A. The regulatory authority, upon notification from the permit holder or the permit holder's authorized agent, shall make the following inspection and such other inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or an agent of any violations that must be corrected. The holder of the permit shall be responsible for the scheduling of the inspections:

1. Underground inspection shall be made after trenches or ditches are excavated, piping and control wiring installed and before any backfill is put in place.
2. Final inspection shall be made after the installation is complete and operational and the installation is ready for use.
3. Where any work does not pass any initial inspection, the necessary corrections shall be made to comply with this chapter. The corrected work shall then be rescheduled for inspection.

Section 4-164 Regulatory Authority's Responsibility

The Regulatory Authority shall be responsible for:

1. verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;
2. inspecting the irrigation system;
3. determining that the irrigation system complies with the requirements of this chapter;
4. determining that the appropriate backflow prevention device was installed, tested, and test results provided to the Regulatory Authority;
5. investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and
6. maintaining records according to this chapter.

C. The Regulatory Authority shall maintain a log of all irrigation systems inspected that includes, but is not limited to the system location, property owner, irrigator responsible for installation, permit status, problems noted during the inspection, and date of inspection. The log must be kept for three years. The log shall be available for review within two business days of the request by the authorized representatives of the Texas Commission on Environmental Quality or any regulatory authority with jurisdiction over landscape issues in the area the Inspector is employed to inspect.

D. The Regulatory Authority may not inspect the following:

1. a landscape irrigation system that is an on-site sewage disposal system, as defined by Section 366.002 of the Texas Health and Safety Code;
2. an irrigation system that is used on or by an agricultural operation as defined by Section 251.002 of the Texas Agriculture Code; or
3. an irrigation system that is connected to a groundwater well used by the property owner for domestic use.

Section 4-165 Regulations and Standards for Fees

A. No permit required by this chapter shall be issued prior to payment of all applicable fees.

B. If a permit fee is paid by check, such payment shall be considered contingent upon payment by the drawee. If the drawee returns the check marked account closed, or insufficient funds, the permit shall be considered invalid.

C. Fees including the permit, registration, reinspection and appeal fees shall be charged in accordance with the amount as established by resolution of the City Council.

D. If work requiring a permit is commenced prior to the issuance of a permit, and a permit is subsequently issued, the fee shall be twice the applicable amount as stated in the fee schedules except that this provision shall not apply to emergency work when it shall be proved to the satisfaction of the Regulatory Authority that such work was done out of urgent necessity and it was not practicable to obtain a permit prior to commencing the work. In all such cases, a permit must be obtained as soon as is practicable. If there is an unreasonable delay in obtaining such permit, a double fee as herein provided shall be charged.

E. No full refund shall be made of any fee paid unless a written request is submitted by the original permittee no later than sixty (60) days after the date of the fee payment, and:

1. the permit has been issued, and no part of the work was commenced; or
2. the permit has been issued through error on the part of the City, and it is found that the work applied for cannot be allowed.

F. Refund of a fee paid for any administrative action other than an irrigation permit shall operate pursuant to the "Construction" Chapter of the Code of the City of Copperas Cove.

G. When it is determined after a permit has been issued that the scope of work is to be significantly changed, the Regulatory Authority may authorize and require that appropriate adjustments be made to the permit fee. Any increase in the permit fee shall be paid prior to performing any part of such increased scope of work. Any decrease in the permit fee which is based on previously approved work which will not be performed shall be refunded in the amount of fifty percent (50%) of the fee related to the work not to be performed, as determined by the Regulatory Authority. No refund shall be made, unless a written request is submitted by the original permittee not later than sixty (60) days following approval of the permittee's change in scope of work.

H. If, after a permit is issued, it is determined that the scope of the work is to be significantly changed, the Regulatory Authority may authorize and require that appropriate adjustments be made to the permit fee. Any resulting increase in permit fee shall be paid prior to performing any part of such increase scope of work. Any resulting decrease in permit fee shall be refunded based on the following equation: (Percentage of work not to be performed multiplied by permit fee paid).

1. The determination of such refund shall be made by the Regulatory Authority.
2. The permittee shall make a written request for the refund.

I. The Regulatory Authority shall make such refund to the permittee no later than sixty (60) days following approval of permittee's written request.

STANDARDS FOR DESIGNING, INSTALLING, AND MAINTAINING IRRIGATION SYSTEMS

Section 4-166 Water Conservation

The city's then existing Water Conservation and Drought Contingency plan supersedes this article when plan is in effect

Section 4-167 Water Conservation

All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in this chapter.

Section 4-168 Minimum Standards for Irrigation Plan Design

A. An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. An approved paper copy of the irrigation plan must be on the job site at all times during the installation and inspection of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

1. diminish the operational integrity of the irrigation system;
2. violate any requirements of this ordinance; and
3. go unnoted in red on the irrigation plan.

B. The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

C. All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

1. the irrigator's seal, signature, and date of signing;
2. all major physical features and the boundaries of the areas to be watered;
3. a North arrow;
4. a legend;
5. the zone flow measurement for each zone;
6. location and type of each:
 - a. controller; and
 - b. sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);
7. location, type, and size of each:

- a. water source, such as, but not limited to a water meter and point(s) of connection;
 - b. backflow prevention device;
 - c. water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;
 - d. valve, including but not limited to, zone valves, master valves, and isolation valves;
 - e. pressure regulation component; and
 - f. main line and lateral piping.
8. the scale used; and
9. the design pressure.

Section 4-169 Minimum Design and Installation Requirements

A. No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

B. Spacing.

1. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.

2. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 60 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. Qualifying areas less than 60 inches may be irrigated utilizing subsurface or drip irrigation, pressure compensating tubing, or be designed without irrigation. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.

3. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

C. Water Pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

D. Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.

E. Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements. All non-turf landscape areas shall be designed with subsurface irrigation, drip irrigation, and/or pressure compensating tubing.

F. Matched Precipitation Rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

G. Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, and streets.

H. Master Valve. A flow control master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

I. Pop-up Heads. Pop-up heads shall be installed at grade level and operated to extend above all landscape turfgrass.

J. PVC Pipe Primer Solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the Plumbing Chapter or the Construction Chapter of the City Code.

K. Operational Rain or Moisture and Freeze Shut-off Devices or Other Technology. All new automatically controlled irrigation systems must include operational sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather and moisture or rainfall. Freeze and rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Rain or moisture and freeze shut-off devices installed must be of a type established and published by the Regulatory Authority.

L. Isolation Valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

M. Depth Coverage of Piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.

1. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

2. utility, man-made structure or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.

3. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

N. Wiring Irrigation Systems.

1. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

2. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.

3. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.

4. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

O. Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

P. A licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

Section 4-170 Backflow Prevention Methods and Devices

A. Any irrigation system that is connected to the potable water supply must be connected in accordance with the Plumbing Chapter, Texas Commission on Environmental Quality rules, this chapter, and other relevant law. All backflow prevention assemblies shall be of a type and model approved by the Regulatory Authority. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

B. If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow;

1. An air gap may be used if:

a. there is an unobstructed physical separation; and

b. the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

2. Reduced pressure principle backflow prevention assemblies may be used if:

a. the device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

b. drainage is provided for any water that may be discharged through the assembly relief valve.

3. Pressure vacuum breakers may be used if:

a. no back-pressure condition will occur; and

b. the device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

C. Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

E. If an irrigation system is connected to a potable water supply and requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.

F. If an irrigation system is connected to a potable water supply through a pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

G. The irrigator shall ensure the backflow prevention device is tested by a licensed Backflow Prevention Assembly Tester prior to being placed in service and the test results shall be provided to the Regulatory Authority and to the irrigation system's owner or owner's representative within ten (10) business days of testing of the backflow prevention device.

Section 4-171 Specific Conditions and Cross-Connection Control

A. Before any chemical is added to an irrigation system connected to the potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

B. Connection of any additional water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

C. Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

D. If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:

1. all irrigation piping and valves must meet the separation distances from the On-Site Sewage Facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);
2. any connections using a private or public potable water source that is not the city's potable water system must be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in Title 30, Texas Administrative Code, Section 344.50; and
3. any water from the irrigation system that is applied to the surface of the area utilized by the On-Site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-Site Sewage Facilities system from operating effectively.

Section 4-172 Completion of Irrigation System Installation

Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

1. a final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system.
2. The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:
 - a. irrigator's name, license number, company name, telephone number, and the dates of the warranty period;
 - b. the manufacturer's manual for the automatic controller;
 - c. a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

d. a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and

e. the statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."

3. A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. The information contained on the sticker must be printed with waterproof ink.

4. The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

Section 4-173 Maintenance, Alteration, Repair, or Service of Irrigation Systems

A. All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill.

B. Colored PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the International Plumbing Code (Section 605).

C. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include the installation of an operational sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather and moisture or rainfall. Rain or moisture and freeze shut-off devices installed must be of a type established and published by the Regulatory Authority.

D. When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve and or an operational rain and freeze sensor shall be installed, if an isolation valve and or operational rain and freeze sensor is not present.

Section 4-174 Reclaimed Water

Reclaimed water may be utilized in landscape irrigation systems if:

1. there is no direct contact with edible crops;

2. the irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;

3. the irrigation system is installed using purple components;

4. a minimum of an eight inch by eight inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER – DO NOT DRINK" and "AGUA DE RECUPERACIÓN – NO BEBER";

5. backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the City; and

6. all permit applications and plans for a landscape irrigation system that uses reclaimed water must be so stated on the plans and the applications.

APPEAL

Section 4-175 Appeal

(a) Any appeals of the interpretation of this ordinance may be made to the supervisor of the building official. An Appeal shall be requested in writing to the building official requesting the appeal of the interpretation of the ordinance within in five (5) business days of the ruling by the building official. If no appeal is filed within five (5) business days of the ruling by the building official, the appellant is considered to have waved their rights of appeal. For the purposes of this ordinance, a written appeal may be made in writing by letter or email addressed to the building official.

(b) The supervisor of the building official will hear all issues and may call a meeting of the applicant applying for the irrigation permit or an existing irrigation permit holder. At this meeting, the supervisor of the building official will attempt to resolve any conflicts through education on the intent of the codes. No code is written and adopted that can possibly predict all circumstances that may arise. The building official and his/her supervisor will seek to identify alternatives to the issues that do not violate the intent of the code but allow individual circumstances to apply using a common sense approach. The supervisor of the building official may elect to have more than one meeting to accomplish a resolution. He/she may also use other resources at his/her discretion to research possible alternatives. These resources may include but are not limited to; other cities with similar ordinances and codes, legal advice from the City Attorney, inquiries to other code officials, and consultation with other staff members of the City of Copperas Cove.

(c) It is generally understood that the appeal meeting(s) will begin within ten (10) business days of the receipt of the appeal.

(d) This appeal process in no way represents a variance to the ordinance. It shall not be interpreted to be a circumvention of the intent of the ordinance. It is intended to seek all possible resolutions to interpretation issues while still complying with the intent of the ordinance.

ENFORCEMENT AND PENALTY

Section 4-176 Enforcement and Penalty

A. The Regulatory Authority shall administer and enforce the provisions of this chapter.

B. Any person violating any provision of this chapter, upon conviction, is guilty of a Class C misdemeanor and punishable by a fine not to exceed \$2000.00. Each day that a provision of this chapter is violated shall constitute a separate offense.

C. The remedies provided by this chapter shall be in addition to all other criminal and civil remedies, which the City is entitled under the authority of statutes, ordinances or in equity to pursue.

2. Any person, firm, corporation, agent or employee thereof who violates any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be fined an amount not to exceed \$2000.00 for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

3. This ordinance shall be and is hereby declared to be cumulative of all other ordinances of the City of Copperas Cove, and this ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, in such other ordinance or ordinances are hereby repealed.

4. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of the remaining portions of this ordinance.

5. All of the regulations provided in this ordinance are hereby declared to be governmental and for the health, safety and welfare of the general public. Any member of the City Council or any City official or employee charged with the enforcement of this ordinance, acting for the City of Copperas Cove in the discharge of his/her duties, shall not thereby render himself/herself personally liable; and he/she is hereby relieved from all personal liability for any damage that might accrue to persons or property as a result of any act required or permitted in the discharge of his/her said duties.

6. Any violation of this ordinance can be enjoined by a suit filed in the name of the City of Copperas Cove in a court of competent jurisdiction, and this remedy shall be in addition to any penal provision in this ordinance or in the Code of the City of Copperas Cove.

7. The caption and penalty clause of this ordinance shall be published in a newspaper of general circulation in the City of Copperas Cove, in compliance with the provisions of Article VII, Section 15, of the City Charter. Further, this ordinance may be published in pamphlet form and shall be admissible in such form in any court, as provided by law.

8. This ordinance shall become effective on TBD.

DRAFT

By: Puente

H.B. No. 4

A BILL TO BE ENTITLED

AN ACT

relating to water conservation.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 1.003, Water Code, is amended to read as follows:

Sec. 1.003. PUBLIC POLICY. It is the public policy of the state to provide for the conservation and development of the state's natural resources, including:

(1) the control, storage, preservation, and distribution of the state's storm and floodwaters and the waters of its rivers and streams for irrigation, power, and other useful purposes;

(2) the reclamation and irrigation of the state's arid, semiarid, and other land needing irrigation;

(3) the reclamation and drainage of the state's overflowed land and other land needing drainage;

(4) the conservation and development of its forest, water, and hydroelectric power;

(5) the navigation of the state's inland and coastal

waters; ~~[and]~~

(6) the maintenance of a proper ecological environment of the bays and estuaries of Texas and the health of related living marine resources; and

(7) the voluntary stewardship of public and private lands to benefit waters of the state.

SECTION 2. Subchapter A, Chapter 1, Water Code, is amended by adding Section 1.004 to read as follows:

Sec. 1.004. FINDINGS AND POLICY REGARDING LAND STEWARDSHIP. (a) The legislature finds that voluntary land stewardship enhances the efficiency and effectiveness of this state's watersheds by helping to increase surface water and groundwater supplies, resulting in a benefit to the natural resources of this state and to the general public. It is therefore the policy of this state to encourage voluntary land stewardship as a significant water management tool.

(b) "Land stewardship," as used in this code, is the voluntary practice of managing land to conserve or enhance suitable landscapes and the ecosystem values of the land. Land stewardship includes land and habitat management, wildlife conservation, and watershed protection. Land stewardship practices include runoff reduction, prescribed burning, managed grazing, brush management, erosion management, reseeding with

native plant species, riparian management and restoration, and
spring and creek-bank protection, all of which benefit the water
resources of this state.

SECTION 3. Subtitle A, Title 2, Water Code, is amended by
adding Chapter 10 to read as follows:

CHAPTER 10. WATER CONSERVATION ADVISORY COUNCIL

Sec. 10.001. DEFINITIONS. In this chapter:

(1) "Best management practices" has the meaning
assigned by Section 11.002.

(2) "Board" means the Texas Water Development Board.

(3) "Commission" means the Texas Commission on
Environmental Quality.

(4) "Council" means the Water Conservation Advisory
Council.

Sec. 10.002. PURPOSE. The council is created to provide
the governor, lieutenant governor, speaker of the house of
representatives, legislature, board, commission, political
subdivisions, and public with the resource of a select council
with expertise in water conservation.

Sec. 10.003. CREATION AND MEMBERSHIP. (a) The council is
composed of 23 members appointed by the board. The board shall
appoint one member to represent each of the following entities
or interest groups:

- (1) Texas Commission on Environmental Quality;
- (2) Department of Agriculture;
- (3) Parks and Wildlife Department;
- (4) State Soil and Water Conservation Board;
- (5) Texas Water Development Board;
- (6) regional water planning groups;
- (7) federal agencies;
- (8) municipalities;
- (9) groundwater conservation districts;
- (10) river authorities;
- (11) environmental groups;
- (12) irrigation districts;
- (13) institutional water users;
- (14) professional organizations focused on water
conservation;
- (15) higher education;
- (16) agricultural groups;
- (17) refining and chemical manufacturing;
- (18) electric generation;
- (19) mining and recovery of minerals;
- (20) landscape irrigation and horticulture;
- (21) water control and improvement districts;
- (22) rural water users; and

(23) municipal utility districts.

(b) Each entity or interest group described by Subsection (a) may recommend one or more persons to fill the position on the council held by the member who represents that entity or interest group. If one or more persons are recommended for a position on the council, the board shall appoint one of the persons recommended to fill the position.

Sec. 10.004. TERMS. (a) Members of the council serve staggered terms of six years, with seven or eight members' terms, as applicable, expiring August 31 of each odd-numbered year.

(b) The board shall fill a vacancy on the council for the unexpired term by appointing a person who has the same qualifications as required under Section 10.003 for the person who previously held the vacated position.

Sec. 10.005. PRESIDING OFFICER. The council members shall select one member as the presiding officer of the council to serve in that capacity until the person's term as a council member expires.

Sec. 10.006. COUNCIL STAFF. On request by the council, the board shall provide any necessary staff to assist the council in the performance of its duties.

Sec. 10.007. PUBLIC MEETINGS AND PUBLIC INFORMATION. (a)

The council may hold public meetings as needed to fulfill its duties under this chapter.

(b) The council is subject to Chapters 551 and 552, Government Code.

Sec. 10.008. INAPPLICABILITY OF ADVISORY COMMITTEE LAW. Chapter 2110, Government Code, does not apply to the size, composition, or duration of the council.

Sec. 10.009. COMPENSATION OF MEMBERS. (a) Members of the council serve without compensation but may be reimbursed by legislative appropriation for actual and necessary expenses related to the performance of council duties.

(b) Reimbursement under Subsection (a) is subject to the approval of the presiding officer of the council.

Sec. 10.010. POWERS AND DUTIES OF COUNCIL. The council shall:

(1) monitor trends in water conservation implementation;

(2) monitor new technologies for possible inclusion by the board as best management practices in the best management practices guide developed by the water conservation implementation task force under Chapter 109, Acts of the 78th Legislature, Regular Session, 2003;

(3) monitor the effectiveness of the statewide water

conservation public awareness program developed under Section 16.401 and associated local involvement in implementation of the program;

(4) develop and implement a state water management resource library;

(5) develop and implement a public recognition program for water conservation;

(6) monitor the implementation of water conservation strategies by water users included in regional water plans; and

(7) monitor target and goal guidelines for water conservation to be considered by the board and commission.

Sec. 10.011. REPORT. Not later than December 1 of each even-numbered year, the council shall submit to the governor, lieutenant governor, and speaker of the house of representatives a report on progress made in water conservation in this state.

Sec. 10.012. DESIGNATION OF CERTIFIED WATER CONSERVATION TRAINING FACILITIES STUDY. (a) The council shall conduct a study to evaluate the desirability of requiring the board to:

(1) designate as certified water conservation training facilities entities and programs that provide assistance to retail public utilities in developing water conservation plans under Section 13.146; and

(2) give preference to certified water conservation

training facilities in making loans or grants for water conservation training and education activities.

(b) Not later than December 1, 2008, the council shall submit a written report containing the findings of the study and the recommendations of the council to the governor, lieutenant governor, and speaker of the house of representatives.

(c) This section expires June 1, 2009.

SECTION 4. Section 11.002, Water Code, is amended by adding Subdivision (15) to read as follows:

(15) "Best management practices" means those voluntary efficiency measures developed by the commission and the board that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specified time frame.

SECTION 5. Section 11.0235(b), Water Code, is amended to read as follows:

(b) Maintaining the biological soundness of the state's rivers, lakes, bays, and estuaries is of great importance to the public's economic health and general well-being. The legislature encourages voluntary water and land stewardship to benefit the water in the state, as defined by Section 26.001.

SECTION 6. Section 11.085(v), Water Code, is amended to read as follows:

(v) The provisions of this section, except Subsection (a), do not apply to:

(1) a proposed transfer which in combination with any existing transfers totals less than 3,000 acre-feet of water per annum from the same permit, certified filing, or certificate of adjudication;

(2) a request for an emergency transfer of water; or

(3) [~~a proposed transfer from a basin to its adjoining coastal basin; or~~

[~~4~~] a proposed transfer from a basin to a county or municipality or the municipality's retail service area that is partially within the basin for use in that part of the county or municipality and the municipality's retail service area not within the basin.

SECTION 7. Subchapter E, Chapter 13, Water Code, is amended by adding Section 13.146 to read as follows:

Sec. 13.146. WATER CONSERVATION PLAN. The commission shall require a retail public utility that provides potable water service to 3,300 or more connections to submit to the executive administrator of the board a water conservation plan based on specific targets and goals developed by the retail public utility and using appropriate best management practices, as defined by Section 11.002, or other water conservation

strategies.

SECTION 8. Section 15.102(b), Water Code, is amended to read as follows:

(b) The loan fund may also be used by the board to provide:

(1) grants or loans for projects that include supplying water and wastewater services in economically distressed areas or nonborder colonias as provided by legislative appropriations, this chapter, and board rules, including projects involving retail distribution of those services; and

(2) grants for:

(A) projects for which federal grant funds are placed in the loan fund;

(B) projects, on specific legislative appropriation for those projects; or

(C) water conservation, desalination, brush control, weather modification, regionalization, and projects providing regional water quality enhancement services as defined by board rule, including regional conveyance systems.

SECTION 9. Chapter 16, Water Code, is amended by adding Subchapter K to read as follows:

SUBCHAPTER K. WATER CONSERVATION

Sec. 16.401. STATEWIDE WATER CONSERVATION PUBLIC AWARENESS

PROGRAM. (a) The executive administrator shall develop and implement a statewide water conservation public awareness program to educate residents of this state about water conservation. The program shall take into account the differences in water conservation needs of various geographic regions of the state and shall be designed to complement and support existing local and regional water conservation programs.

(b) The executive administrator is required to develop and implement the program required by Subsection (a) in a state fiscal biennium only if the legislature appropriates sufficient money in that biennium specifically for that purpose.

Sec. 16.402. WATER CONSERVATION PLAN REVIEW. (a) Each entity that is required to submit a water conservation plan to the commission under this code shall submit a copy of the plan to the executive administrator.

(b) Each entity that is required to submit a water conservation plan to the executive administrator, board, or commission under this code shall report annually to the executive administrator on the entity's progress in implementing the plan.

(c) The executive administrator shall review each water conservation plan and annual report to determine compliance with

the minimum requirements established by Section 11.1271 and the submission deadlines developed under Subsection (e) of this section.

(d) The board may notify the commission if the board determines that an entity has violated this section or a rule adopted under this section. Notwithstanding Section 7.051(b), a violation of this section or of a rule adopted under this section is enforceable in the manner provided by Chapter 7 for a violation of a provision of this code within the commission's jurisdiction or of a rule adopted by the commission under a provision of this code within the commission's jurisdiction.

(e) The board and commission jointly shall adopt rules:

(1) identifying the minimum requirements and submission deadlines for the annual reports required by Subsection (b); and

(2) providing for the enforcement of this section and rules adopted under this section.

SECTION 10. Subchapter Z, Chapter 51, Education Code, is amended by adding Section 51.969 to read as follows:

Sec. 51.969. ON-SITE RECLAIMED SYSTEM TECHNOLOGIES CURRICULUM. The Texas Higher Education Coordinating Board shall encourage each institution of higher education to develop curriculum and provide related instruction regarding on-site

reclaimed system technologies, including rainwater harvesting, condensate collection, or cooling tower blow down.

SECTION 11. Section 447.004, Government Code, is amended by adding Subsection (c-1) to read as follows:

(c-1) The procedural standards adopted under this section must require that on-site reclaimed system technologies, including rainwater harvesting, condensate collection, or cooling tower blow down, or a combination of those system technologies, for nonpotable indoor use and landscape watering be incorporated into the design and construction of:

(1) each new state building with a roof measuring at least 10,000 square feet; and

(2) any other new state building for which the incorporation of such systems is feasible.

SECTION 12. Section 341.042, Health and Safety Code, is amended to read as follows:

Sec. 341.042. STANDARDS FOR HARVESTED RAINWATER. (a) The commission shall establish recommended standards relating to the domestic use of harvested rainwater, including health and safety standards for treatment and collection methods for harvested rainwater intended for drinking, cooking, or bathing.

(b) The commission by rule shall provide that if a structure is connected to a public water supply system and has a

rainwater harvesting system for indoor use:

(1) the structure must have appropriate cross-connection safeguards; and

(2) the rainwater harvesting system may be used only for nonpotable indoor purposes.

(c) Standards and rules adopted by the commission under this chapter governing public drinking water supply systems do not apply to a person:

(1) who harvests rainwater for domestic use; and

(2) whose property is not connected to a public drinking water supply system.

SECTION 13. Chapter 401, Local Government Code, is amended by adding Section 401.006 to read as follows:

Sec. 401.006. WATER CONSERVATION BY HOME-RULE MUNICIPALITY. A home-rule municipality may adopt and enforce ordinances requiring water conservation in the municipality and by customers of the municipality's municipally owned water and sewer utility in the extraterritorial jurisdiction of the municipality.

SECTION 14. Section 1903.053, Occupations Code, is amended to read as follows:

Sec. 1903.053. STANDARDS. (a) The commission shall adopt by rule and enforce standards governing:

(1) the connection of irrigation systems to any water supply;

(2) the design, installation, and operation of irrigation systems;

(3) water conservation; and

(4) the duties and responsibilities of licensed irrigators.

~~(b) [The commission may adopt standards for irrigation that include water conservation, irrigation system design and installation, and compliance with municipal codes.]~~

~~[(e)]~~ The commission may not require or prohibit the use of any irrigation system, component part, or equipment of any particular brand or manufacturer.

(c) In adopting standards under this section, the commission shall consult the council.

SECTION 15. As soon as practicable on or after the effective date of this Act, the Texas Water Development Board shall appoint the initial members of the Water Conservation Advisory Council, as required by Section 10.003, Water Code, as added by this Act. In making the initial appointments, the board shall designate seven members to serve terms expiring August 31, 2009, eight members to serve terms expiring August 31, 2011, and eight members to serve terms expiring August 31,

2013.

SECTION 16. Section 11.085, Water Code, as amended by this Act, applies to a transfer of state water from a basin to its adjoining coastal basin that is proposed on or after the effective date of this Act. The provisions of Section 11.085, Water Code, as amended by this Act, other than Subsection (a) of that section, do not apply to a transfer of state water from a basin to its adjoining coastal basin that was proposed before the effective date of this Act.

SECTION 17. Section 15.102(b), Water Code, as amended by this Act, applies only to an application for financial assistance filed with the Texas Water Development Board on or after the effective date of this Act. An application for financial assistance filed before the effective date of this Act is governed by the law in effect on the date the application was filed, and the former law is continued in effect for that purpose.

SECTION 18. Not later than January 1, 2008, the Texas Water Development Board and the Texas Commission on Environmental Quality jointly shall adopt rules as required by Section 16.402(e), Water Code, as added by this Act.

SECTION 19. Not later than June 1, 2008, the Texas Commission on Environmental Quality shall adopt standards as

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required by Section 1903.053, Occupations Code, as amended by
this Act, to take effect January 1, 2009.

SECTION 20. (a) Except as provided by Subsection (b) of
this section, this Act takes effect immediately if it receives a
vote of two-thirds of all the members elected to each house, as
provided by Section 39, Article III, Texas Constitution. If
this Act does not receive the vote necessary for immediate
effect, this Act takes effect September 1, 2007.

(b) Section 11 of this Act takes effect September 1, 2009.

By: Puente

H.B. No. 1656

A BILL TO BE ENTITLED

AN ACT

relating to regulation of irrigation systems and irrigators.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 1903.251, Occupations Code, is amended to read as follows:

Sec. 1903.251. LICENSE REQUIRED. (a) A person must hold a license issued by the commission under Chapter 37, Water Code, if the person:

(1) sells, designs, installs, maintains, alters, repairs, or services an irrigation system;

(2) provides consulting services relating to an irrigation system; ~~[or]~~

(3) connects an irrigation system to a private or public, raw or potable water supply system or any water supply; or

(4) inspects an irrigation system for a municipality or water district.

(b) A person is ineligible for a license under Subsection (a)(4) if the person engages in or has a financial or advisory

interest in an entity that engages in an activity under Subsection (a)(1), (2), or (3).

SECTION 2. Subchapter H, Chapter 49, Water Code, is amended by adding Section 49.238 to read as follows:

Sec. 49.238. IRRIGATION SYSTEMS. (a) A district may adopt and enforce rules that require an installer of an irrigation system:

(1) to hold a license issued under Section 1903.251, Occupations Code; and

(2) to obtain a permit before installing a system within the boundaries of the district.

(b) If a district adopts rules under Subsection (a), the rules shall include minimum standards and specifications for designing, installing, and operating irrigation systems in accordance with Section 1903.053, Occupations Code, and any rules adopted by the Texas Commission on Environmental Quality under that section.

(c) A district may employ or contract with a licensed plumbing inspector, a licensed irrigation inspector, the district's operator, or another governmental entity to enforce the rules.

(d) A district may charge an installer of an irrigation system a fee for obtaining or renewing a permit under Subsection

(a)(2). The district shall set the fee in an amount sufficient to enable the district to recover the cost of administering this section.

(e) This section does not apply to:

(1) an on-site sewage disposal system, as defined by Section 366.002, Health and Safety Code; or

(2) an irrigation system:

(A) used on or by an agricultural operation as defined by Section 251.002, Agriculture Code; or

(B) connected to a groundwater well used by the property owner for domestic use.

SECTION 3. Chapter 401, Local Government Code, is amended by adding Section 401.006 to read as follows:

Sec. 401.006. IRRIGATION SYSTEMS. (a) A municipality with a population of 20,000 or more by ordinance shall require an installer of an irrigation system:

(1) to hold a license issued under Section 1903.251, Occupations Code; and

(2) to obtain a permit before installing a system within the territorial limits or extraterritorial jurisdiction of the municipality.

(b) The ordinance shall include minimum standards and specifications for designing, installing, and operating

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irrigation systems in accordance with Section 1903.053,
Occupations Code, and any rules adopted by the Texas Commission
on Environmental Quality under that section.

(c) A municipality may employ or contract with a licensed
plumbing inspector or a licensed irrigation inspector to enforce
the ordinance.

(d) A municipality may charge an installer of an
irrigation system a fee for obtaining or renewing a permit under
Subsection (a)(2). The municipality shall set the fee in an
amount sufficient to enable the municipality to recover the cost
of administering this section.

(e) This section does not apply to:

(1) an on-site sewage disposal system, as defined by
Section 366.002, Health and Safety Code; or

(2) an irrigation system:

(A) used on or by an agricultural operation as
defined by Section 251.002, Agriculture Code; or

(B) connected to a groundwater well used by the
property owner for domestic use.

SECTION 4. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary

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for immediate effect, this Act takes effect September 1, 2007.

By: Averitt

S.B. No. 3

A BILL TO BE ENTITLED

AN ACT

relating to the development, management, and preservation of the water resources of the state; providing penalties.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1.01. The heading to Section 5.506, Water Code, is amended to read as follows:

Sec. 5.506. EMERGENCY SUSPENSION OF PERMIT CONDITION RELATING TO, AND EMERGENCY AUTHORITY TO MAKE AVAILABLE WATER SET ASIDE FOR, BENEFICIAL INFLOWS TO AFFECTED BAYS AND ESTUARIES AND INSTREAM USES.

SECTION 1.02. Section 5.506, Water Code, is amended by adding Subsection (a-1) and amending Subsections (b) and (c) to read as follows:

(a-1) State water that is set aside by the commission to meet the needs for freshwater inflows to affected bays and estuaries and instream uses under Section 11.1471(a)(2) may be made available temporarily for other essential beneficial uses if the commission finds that an emergency exists that cannot practically be resolved in another way.

(b) The commission must give written notice of the

proposed action [~~suspension~~] to the Parks and Wildlife Department before the commission suspends a permit condition under Subsection (a) or makes water available temporarily under Subsection (a-1) [~~this section~~]. The commission shall give the Parks and Wildlife Department an opportunity to submit comments on the proposed action [~~suspension~~] for a period of 72 hours from receipt of the notice and must consider those comments before issuing an order implementing the proposed action [~~imposing the suspension~~].

(c) The commission may suspend a permit condition under Subsection (a) or make water available temporarily under Subsection (a-1) [~~this section~~] without notice except as required by Subsection (b).

SECTION 1.03. Subsection (j), Section 5.701, Water Code, is amended to read as follows:

(j) The fee for other uses of water not specifically named in this section is \$1 per acre-foot, except that no political subdivision may be required to pay fees to use water for recharge of underground freshwater-bearing sands and aquifers or for abatement of natural pollution. A fee is not required for a water right that is [~~This fee is waived for applications for instream-use water rights~~] deposited into the Texas Water Trust.

SECTION 1.04. Section 11.002, Water Code, is amended by adding Subdivisions (15), (16), (17), (18), and (19) to read as

follows:

(15) "Environmental flow analysis" means the application of a scientifically derived process for predicting the response of an ecosystem to changes in instream flows or freshwater inflows.

(16) "Environmental flow regime" means a schedule of flow quantities that reflects seasonal and yearly fluctuations that typically would vary geographically, by specific location in a watershed, and that are shown to be adequate to support a sound ecological environment and to maintain the productivity, extent, and persistence of key aquatic habitats in and along the affected water bodies.

(17) "Environmental flow standards" means those requirements adopted by the commission under Section 11.1471.

(18) "Advisory group" means the environmental flows advisory group.

(19) "Science advisory committee" means the Texas environmental flows science advisory committee.

SECTION 1.05. Subsection (a), Section 11.023, Water Code, is amended to read as follows:

(a) To the extent that state water has not been set aside by the commission under Section 11.1471(a)(2) to meet downstream instream flow needs or freshwater inflow needs, state [State] water may be appropriated, stored, or diverted for:

(1) domestic and municipal uses, including water for sustaining human life and the life of domestic animals;

(2) agricultural uses and industrial uses, meaning processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, including the development of power by means other than hydroelectric;

(3) mining and recovery of minerals;

(4) hydroelectric power;

(5) navigation;

(6) recreation and pleasure;

(7) public parks; and

(8) game preserves.

SECTION 1.06. Section 11.0235, Water Code, is amended by amending Subsections (b), (c), and (e) and adding Subsections (d-1) through (d-6) and (f) to read as follows:

(b) Maintaining the biological soundness of the state's rivers, lakes, bays, and estuaries is of great importance to the public's economic health and general well-being. The legislature encourages voluntary water and land stewardship to benefit the water in the state, as defined by Section 26.001.

(c) The legislature has expressly required the commission while balancing all other public interests to consider and, to the extent practicable, provide for the freshwater inflows and

instream flows necessary to maintain the viability of the state's streams, rivers, and bay and estuary systems in the commission's regular granting of permits for the use of state waters. As an essential part of the state's environmental flows policy, all permit conditions relating to freshwater inflows to affected bays and estuaries and instream flow needs must be subject to temporary suspension if necessary for water to be applied to essential beneficial uses during emergencies.

(d-1) The legislature has determined that existing water rights that are amended to authorize use for environmental purposes should be enforced in a manner consistent with the enforcement of water rights for other purposes as provided by the laws of this state governing the appropriation of state water.

(d-2) The legislature finds that to provide certainty in water management and development and to provide adequate protection of the state's streams, rivers, and bays and estuaries, the state must have a process with specific timelines for prompt action to address environmental flow issues in the state's major basin and bay systems, especially those systems in which unappropriated water is still available.

(d-3) The legislature finds that:

(1) in those basins in which water is available for appropriation, the commission should establish an environmental

set-aside below which water should not be available for appropriation; and

(2) in those basins in which the unappropriated water that will be set aside for instream flow and freshwater inflow protection is not sufficient to fully satisfy the environmental flow standards established by the commission, a variety of market approaches, both public and private, for filling the gap must be explored and pursued.

(d-4) The legislature finds that while the state has pioneered tools to address freshwater inflow needs for bays and estuaries, there are limitations to those tools in light of both scientific and public policy evolution. To fully address bay and estuary environmental flow issues, the foundation of work accomplished by the state should be improved. While the state's instream flow studies program appears to encompass a comprehensive and scientific approach for establishing a process to assess instream flow needs for rivers and streams across the state, more extensive review and examination of the details of the program, which may not be fully developed until the program is under way, are needed to ensure an effective tool for evaluating riverine environmental flow conditions.

(d-5) The legislature finds that the management of water to meet instream flow and freshwater inflow needs should be evaluated on a regular basis and adapted to reflect both

improvements in science related to environmental flows and future changes in projected human needs for water. In addition, the development of management strategies for addressing environmental flow needs should be an ongoing, adaptive process that considers and addresses local issues.

(d-6) The legislature finds that recommendations for state action to protect instream flows and freshwater inflows should be developed through a consensus-based, regional approach involving balanced representation of stakeholders and that such a process should be encouraged throughout the state.

(e) The fact that greater pressures and demands are being placed on the water resources of the state makes it of paramount importance to ensure [~~reexamine the process for ensuring~~] that these important priorities are effectively addressed by detailing how environmental flow standards are to be developed using the environmental studies that have been and are to be performed by the state and others and specifying in clear delegations of authority how those environmental flow standards will be integrated into the regional water planning and water permitting process [~~to the commission~~].

(f) The legislature recognizes that effective implementation of the approach provided by this chapter for protecting instream flows and freshwater inflows will require more effective water rights administration and enforcement

systems than are currently available in most areas of the state.

SECTION 1.07. Subchapter B, Chapter 11, Water Code, is amended by adding Sections 11.0236, 11.02361, 11.02362, and 11.0237 to read as follows:

Sec. 11.0236. ENVIRONMENTAL FLOWS ADVISORY GROUP. (a) In recognition of the importance that the ecological soundness of our riverine, bay, and estuary systems and riparian lands has on the economy, health, and well-being of the state there is created the environmental flows advisory group.

(b) The advisory group is composed of nine members as follows:

(1) three members appointed by the governor;

(2) three members of the senate appointed by the lieutenant governor; and

(3) three members of the house of representatives appointed by the speaker of the house of representatives.

(c) Of the members appointed under Subsection (b)(1):

(1) one member must be a member of the commission;

(2) one member must be a member of the board; and

(3) one member must be a member of the Parks and Wildlife Commission.

(d) Each member of the advisory group serves at the will of the person who appointed the member.

(e) The appointed senator with the most seniority and the

appointed house member with the most seniority serve together as co-presiding officers of the advisory group.

(f) A member of the advisory group is not entitled to receive compensation for service on the advisory group but is entitled to reimbursement of the travel expenses incurred by the member while conducting the business of the advisory group, as provided by the General Appropriations Act.

(g) The advisory group may accept gifts and grants from any source to be used to carry out a function of the advisory group.

(h) The commission shall provide staff support for the advisory group.

(i) The advisory group shall conduct public hearings and study public policy implications for balancing the demands on the water resources of the state resulting from a growing population with the requirements of the riverine, bay, and estuary systems including granting permits for instream flows dedicated to environmental needs or bay and estuary inflows, use of the Texas Water Trust, and any other issues that the advisory group determines have importance and relevance to the protection of environmental flows. In evaluating the options for providing adequate environmental flows, the advisory group shall take notice of the strong public policy imperative that exists in this state recognizing that environmental flows are important to

the biological health of our public and private lands, streams and rivers, and bay and estuary systems and are high priorities in the water management process. The advisory group shall specifically address:

(1) ways that the ecological soundness of those systems will be ensured in the water rights administration and enforcement and water allocation processes; and

(2) appropriate methods to encourage persons voluntarily to convert reasonable amounts of existing water rights to use for environmental flow protection temporarily or permanently.

(j) The advisory group may adopt rules, procedures, and policies as needed to administer this section, to implement its responsibilities, and to exercise its authority under Sections 11.02361 and 11.02362.

(k) Chapter 2110, Government Code, does not apply to the size, composition, or duration of the advisory group.

(l) Not later than December 1, 2008, and every two years thereafter, the advisory group shall issue and promptly deliver to the governor, lieutenant governor, and speaker of the house of representatives copies of a report summarizing:

(1) any hearings conducted by the advisory group;

(2) any studies conducted by the advisory group;

(3) any legislation proposed by the advisory group;

(4) progress made in implementing Sections 11.02361 and 11.02362; and

(5) any other findings and recommendations of the advisory group.

(m) The advisory group is abolished on the date that the commission has adopted environmental flow standards under Section 11.1471 for all of the river basin and bay systems in this state.

Sec. 11.02361. TEXAS ENVIRONMENTAL FLOWS SCIENCE ADVISORY COMMITTEE. (a) The Texas environmental flows science advisory committee consists of at least five but not more than nine members appointed by the advisory group.

(b) The advisory group shall appoint to the science advisory committee persons who will provide an objective perspective and diverse technical expertise, including expertise in hydrology, hydraulics, water resources, aquatic and terrestrial biology, geomorphology, geology, water quality, computer modeling, and other technical areas pertinent to the evaluation of environmental flows.

(c) Members of the science advisory committee serve five-year terms expiring March 1. A vacancy on the science advisory committee is filled by appointment by the co-presiding officers of the advisory group for the unexpired term.

(d) Chapter 2110, Government Code, does not apply to the

size, composition, or duration of the science advisory committee.

(e) The science advisory committee shall:

(1) serve as an objective scientific body to advise and make recommendations to the advisory group on issues relating to the science of environmental flow protection; and

(2) develop recommendations to help provide overall direction, coordination, and consistency relating to:

(A) environmental flow methodologies for bay and estuary studies and instream flow studies;

(B) environmental flow programs at the commission, the Parks and Wildlife Department, and the board; and

(C) the work of the basin and bay expert science teams described in Section 11.02362.

(f) To assist the advisory group to assess the extent to which the recommendations of the science advisory committee are considered and implemented, the commission, the Parks and Wildlife Department, and the board shall provide written reports to the advisory group, at intervals determined by the advisory group, that describe:

(1) the actions taken by each agency in response to each recommendation; and

(2) for each recommendation not implemented, the

reason it was not implemented.

(g) The science advisory committee is abolished on the date the advisory group is abolished under Section 11.0236(m).

Sec. 11.02362. DEVELOPMENT OF ENVIRONMENTAL FLOW REGIME RECOMMENDATIONS. (a) For the purposes of this section, the advisory group, not later than November 1, 2007, shall define the geographical extent of each river basin and bay system in this state for the sole purpose of developing environmental flow regime recommendations under this section and adoption of environmental flow standards under Section 11.1471.

(b) The advisory group shall give priority in descending order to the following river basin and bay systems of the state for the purpose of developing environmental flow regime recommendations and adopting environmental flow standards:

(1) the river basin and bay system consisting of the Trinity and San Jacinto Rivers and Galveston Bay and the river basin and bay system consisting of the Sabine and Neches Rivers and Sabine Lake Bay;

(2) the river basin and bay system consisting of the Colorado and Lavaca Rivers and Matagorda and Lavaca Bays and the river basin and bay system consisting of the Guadalupe, San Antonio, Mission, and Aransas Rivers and Mission, Copano, Aransas, and San Antonio Bays; and

(3) the river basin and bay system consisting of the

Nueces River and Corpus Christi and Baffin Bays, the river basin and bay system consisting of the Rio Grande, the Rio Grande estuary, and the Lower Laguna Madre, and the Brazos River and its associated bay and estuary system.

(c) For the river basin and bay systems listed in Subsection (b)(1):

(1) the advisory group shall appoint the basin and bay area stakeholders committee not later than November 1, 2007;

(2) the basin and bay area stakeholders committee shall establish a basin and bay expert science team not later than March 1, 2008;

(3) the basin and bay expert science team shall finalize environmental flow regime recommendations and submit them to the basin and bay area stakeholders committee, the advisory group, and the commission not later than March 1, 2009, except that at the request of the basin and bay area stakeholders committee for good cause shown, the advisory group may extend the deadline provided by this subdivision;

(4) the basin and bay area stakeholders committee shall submit to the commission its comments on and recommendations regarding the basin and bay expert science team's recommended environmental flow regime not later than September 1, 2009; and

(5) the commission shall adopt the environmental flow

standards as provided by Section 11.1471 not later than September 1, 2010.

(d) The advisory group shall appoint the basin and bay area stakeholders committees for the river basin and bay systems listed in Subsection (b)(2) not later than September 1, 2008, and shall appoint the basin and bay area stakeholders committees for the river basin and bay systems listed in Subsection (b)(3) not later than September 1, 2009. The advisory group shall establish a schedule for the performance of the tasks listed in Subsections (c)(2) through (5) with regard to the river basin and bay systems listed in Subsections (b)(2) and (3) that will result in the adoption of environmental flow standards for that river basin and bay system by the commission as soon as is reasonably possible. Each basin and bay area stakeholders committee and basin and bay expert science team for a river basin and bay system listed in Subsection (b)(2) or (3) shall make recommendations to the advisory group with regard to the schedule applicable to that river basin and bay system. The advisory group shall consider the recommendations of the basin and bay area stakeholders committee and basin and bay expert science team as well as coordinate with, and give appropriate consideration to the recommendations of, the commission, the Parks and Wildlife Department, and the board in establishing the schedule.

(e) For a river basin and bay system or a river basin that does not have an associated bay system in this state not listed in Subsection (b), the advisory group shall establish a schedule for the development of environmental flow regime recommendations and the adoption of environmental flow standards. The advisory group shall develop the schedule in consultation with the commission, the Parks and Wildlife Department, the board, and the pertinent basin and bay area stakeholders committee and basin and bay expert science team. The advisory group may, on its own initiative or on request, modify a schedule established under this subsection to be more responsive to particular circumstances, local desires, changing conditions, or time-sensitive conflicts. This subsection does not prohibit, in a river basin and bay system for which the advisory group has not yet established a schedule for the development of environmental flow regime recommendations and the adoption of environmental flow standards, an effort to develop information on environmental flow needs and ways in which those needs can be met by a voluntary consensus-building process.

(f) The advisory group shall appoint a basin and bay area stakeholders committee for each river basin and bay system in this state for which a schedule for the development of environmental flow regime recommendations and the adoption of environmental flow standards is specified by or established

under Subsection (c), (d), or (e). Chapter 2110, Government Code, does not apply to the size, composition, or duration of a basin and bay area stakeholders committee. Each committee must consist of at least 17 members. The membership of each committee must:

(1) reflect a fair and equitable balance of interest groups concerned with the particular river basin and bay system for which the committee is established; and

(2) be representative of appropriate stakeholders, including the following if they have a presence in the particular river basin and bay system for which the committee is established:

(A) agricultural water users, including representatives of each of the following sectors:

(i) agricultural irrigation;

(ii) free-range livestock; and

(iii) concentrated animal feeding operation;

(B) recreational water users, including coastal recreational anglers and businesses supporting water recreation;

(C) municipalities;

(D) soil and water conservation districts;

(E) industrial water users, including representatives of each of the following sectors:

(i) refining;
(ii) chemical manufacturing;
(iii) electricity generation; and
(iv) production of paper products or
timber;

(F) commercial fishermen;
(G) public interest groups;
(H) regional water planning groups;
(I) groundwater conservation districts;
(J) river authorities and other conservation and
reclamation districts with jurisdiction over surface water; and
(K) environmental interests.

(g) Members of a basin and bay area stakeholders committee
serve five-year terms expiring March 1. If a vacancy occurs on
a committee, the remaining members of the committee by majority
vote shall appoint a member to serve the remainder of the
unexpired term.

(h) Meetings of a basin and bay area stakeholders
committee must be open to the public.

(i) Each basin and bay area stakeholders committee shall
establish a basin and bay expert science team for the river
basin and bay system for which the committee is established.
The basin and bay expert science team must be established not
later than six months after the date the basin and bay area

stakeholders committee is established. Chapter 2110, Government Code, does not apply to the size, composition, or duration of a basin and bay expert science team. Each basin and bay expert science team must be composed of technical experts with special expertise regarding the river basin and bay system or regarding the development of environmental flow regimes. A person may serve as a member of more than one basin and bay expert science team at the same time.

(j) The members of a basin and bay expert science team serve five-year terms expiring April 1. A vacancy on a basin and bay expert science team is filled by appointment by the pertinent basin and bay area stakeholders committee to serve the remainder of the unexpired term.

(k) The science advisory committee shall appoint one of its members to serve as a liaison to each basin and bay expert science team to facilitate coordination and consistency in environmental flow activities throughout the state. The commission, the Parks and Wildlife Department, and the board shall provide technical assistance to each basin and bay expert science team, including information about the studies conducted under Sections 16.058 and 16.059, and may serve as nonvoting members of the basin and bay expert science team to facilitate the development of environmental flow regime recommendations.

(l) Where reasonably practicable, meetings of a basin and

bay expert science team must be open to the public.

(m) Each basin and bay expert science team shall develop environmental flow analyses and a recommended environmental flow regime for the river basin and bay system for which the team is established through a collaborative process designed to achieve a consensus. In developing the analyses and recommendations, the science team must consider all reasonably available science, without regard to the need for the water for other uses, and the science team's recommendations must be based solely on the best science available. For the Rio Grande below Fort Quitman, any uses attributable to Mexican water flows must be excluded from environmental flow regime recommendations.

(n) Each basin and bay expert science team shall submit its environmental flow analyses and environmental flow regime recommendations to the pertinent basin and bay area stakeholders committee, the advisory group, and the commission in accordance with the applicable schedule specified by or established under Subsection (c), (d), or (e). The basin and bay area stakeholders committee and the advisory group may not change the environmental flow analyses or environmental flow regime recommendations of the basin and bay expert science team.

(o) Each basin and bay area stakeholders committee shall review the environmental flow analyses and environmental flow regime recommendations submitted by the committee's basin and

basin expert science team and shall consider them in conjunction with other factors, including the present and future needs for water for other uses related to water supply planning in the pertinent river basin and bay system. For the Rio Grande, the basin and bay area stakeholders committee shall also consider the water accounting requirements for any international water sharing treaty, minutes, and agreement applicable to the Rio Grande and the effects on allocation of water by the Rio Grande watermaster in the middle and lower Rio Grande. The Rio Grande basin and bay expert science team may not recommend any environmental flow regime that would result in a violation of a treaty or court decision. The basin and bay area stakeholders committee shall develop recommendations regarding environmental flow standards and strategies to meet the environmental flow standards and submit those recommendations to the commission and to the advisory group in accordance with the applicable schedule specified by or established under Subsection (c), (d), or (e). In developing its recommendations, the basin and bay area stakeholders committee shall operate on a consensus basis to the maximum extent possible.

(p) In recognition of the importance of adaptive management, after submitting its recommendations regarding environmental flow standards and strategies to meet the environmental flow standards to the commission, each basin and

bay area stakeholders committee, with the assistance of the pertinent basin and bay expert science team, shall prepare and submit for approval by the advisory group a work plan. The work plan must:

(1) establish a periodic review of the basin and bay environmental flow analyses and environmental flow regime recommendations, environmental flow standards, and strategies, to occur at least once every 10 years;

(2) prescribe specific monitoring, studies, and activities; and

(3) establish a schedule for continuing the validation or refinement of the basin and bay environmental flow analyses and environmental flow regime recommendations, the environmental flow standards adopted by the commission, and the strategies to achieve those standards.

(q) In accordance with the applicable schedule specified by or established under Subsection (c), (d), or (e), the advisory group, with input from the science advisory committee, shall review the environmental flow analyses and environmental flow regime recommendations submitted by each basin and bay expert science team. If appropriate, the advisory group shall submit comments on the analyses and recommendations to the commission for use by the commission in adopting rules under Section 11.1471. Comments must be submitted not later than six

months after the date of receipt of the analyses and recommendations.

(r) Notwithstanding the other provisions of this section, in the event the commission, by permit or order, has established an estuary advisory council with specific duties related to implementation of permit conditions for environmental flows, that council may continue in full force and effect and shall act as and perform the duties of the basin and bay area stakeholders committee under this section. The estuary advisory council shall add members from stakeholder groups and from appropriate science and technical groups, if necessary, to fully meet the criteria for membership established in Subsection (f) and shall operate under the provisions of this section.

(s) Each basin and bay area stakeholders committee and basin and bay expert science team is abolished on the date the advisory group is abolished under Section 11.0236(m).

Sec. 11.0237. WATER RIGHTS FOR INSTREAM FLOWS DEDICATED TO ENVIRONMENTAL NEEDS OR BAY AND ESTUARY INFLOWS. (a) The commission may not issue a new permit for instream flows dedicated to environmental needs or bay and estuary inflows. The commission may approve an application to amend an existing permit or certificate of adjudication to change the use to or add a use for instream flows dedicated to environmental needs or bay and estuary inflows.

(b) This section does not alter the commission's obligations under Section 11.042(b) or (c), 11.046(b), 11.085(k)(2)(F), 11.134(b)(3)(D), 11.147, 11.1471, 11.1491, 11.150, 11.152, 16.058, or 16.059.

SECTION 1.08. Subsection (b), Section 11.082, Water Code, is amended to read as follows:

(b) The state may recover the penalties prescribed in Subsection (a) [~~of this section~~] by suit brought for that purpose in a court of competent jurisdiction. The state may seek those penalties regardless of whether a watermaster has been appointed for the water division, river basin, or segment of a river basin where the unlawful use is alleged to have occurred.

SECTION 1.09. Section 11.0841, Water Code, is amended by adding Subsection (c) to read as follows:

(c) For purposes of this section, the Parks and Wildlife Department has:

(1) the rights of a holder of a water right that is held in the Texas Water Trust, including the right to file suit in a civil court to prevent the unlawful use of such a right;

(2) the right to act in the same manner that a holder of a water right may act to protect the holder's rights in seeking to prevent any person from appropriating water in violation of a set-aside established by the commission under

Section 11.1471 to meet instream flow needs or freshwater inflow needs; and

(3) the right to file suit in a civil court to prevent the unlawful use of a set-aside established under Section 11.1471.

SECTION 1.10. Subsection (a), Section 11.0842, Water Code, is amended to read as follows:

(a) If a person violates this chapter, a rule or order adopted under this chapter or Section 16.236 [~~of this code~~], or a permit, certified filing, or certificate of adjudication issued under this chapter, the commission may assess an administrative penalty against that person as provided by this section. The commission may assess an administrative penalty for a violation relating to a water division or a river basin or segment of a river basin regardless of whether a watermaster has been appointed for the water division or river basin or segment of the river basin.

SECTION 1.11. Subsection (a), Section 11.0843, Water Code, is amended to read as follows:

(a) Upon witnessing a violation of this chapter or a rule or order or a water right issued under this chapter, the executive director or a person designated by the executive director, including a watermaster or the watermaster's deputy, [~~as defined by commission rule,~~] may issue the alleged violator

a field citation alleging that a violation has occurred and providing the alleged violator the option of either:

(1) without admitting to or denying the alleged violation, paying an administrative penalty in accordance with the predetermined penalty amount established under Subsection (b) [~~of this section~~] and taking remedial action as provided in the citation; or

(2) requesting a hearing on the alleged violation in accordance with Section 11.0842 [~~of this code~~].

SECTION 1.12. Subsection (b), Section 11.134, Water Code, is amended to read as follows:

(b) The commission shall grant the application only if:

(1) the application conforms to the requirements prescribed by this chapter and is accompanied by the prescribed fee;

(2) unappropriated water is available in the source of supply;

(3) the proposed appropriation:

(A) is intended for a beneficial use;

(B) does not impair existing water rights or vested riparian rights;

(C) is not detrimental to the public welfare;

(D) considers any applicable environmental flow standards established under Section 11.1471 and, if applicable,

the assessments performed under Sections 11.147(d) and (e) and Sections 11.150, 11.151, and 11.152; and

(E) addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan for any area in which the proposed appropriation is located, unless the commission determines that conditions warrant waiver of this requirement; and

(4) the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined by [~~Subdivision (8)(B),~~] Section 11.002(8)(B) [~~11.002~~].

SECTION 1.13. Section 11.147, Water Code, is amended by amending Subsections (b), (d), and (e) and adding Subsections (e-1), (e-2), and (e-3) to read as follows:

(b) In its consideration of an application for a permit to store, take, or divert water, the commission shall assess the effects, if any, of the issuance of the permit on the bays and estuaries of Texas. For permits issued within an area that is 200 river miles of the coast, to commence from the mouth of the river thence inland, the commission shall include in the permit any conditions considered necessary to maintain beneficial inflows to any affected bay and estuary system, to the extent practicable when considering all public interests and the studies mandated by Section 16.058 as evaluated under Section

11.1491[~~, those conditions considered necessary to maintain beneficial inflows to any affected bay and estuary system~~].

(d) In its consideration of an application to store, take, or divert water, the commission shall include in the permit, to the extent practicable when considering all public interests, those conditions considered by the commission necessary to maintain existing instream uses and water quality of the stream or river to which the application applies. In determining what conditions to include in the permit under this subsection, the commission shall consider among other factors:

(1) the studies mandated by Section 16.059; and

(2) any water quality assessment performed under Section 11.150.

(e) The commission shall include in the permit, to the extent practicable when considering all public interests, those conditions considered by the commission necessary to maintain fish and wildlife habitats. In determining what conditions to include in the permit under this subsection, the commission shall consider any assessment performed under Section 11.152.

(e-1) Any permit for a new appropriation of water or an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted must include a provision allowing the commission to adjust the conditions included in the permit or amended water right to

provide for protection of instream flows or freshwater inflows.
With respect to an amended water right, the provision may not
allow the commission to adjust a condition of the amendment
other than a condition that applies only to the increase in the
amount of water to be stored, taken, or diverted authorized by
the amendment. This subsection does not affect an appropriation
of or an authorization to store, take, or divert water under a
permit or amendment to a water right issued before September 1,
2007. The commission shall adjust the conditions if the
commission determines, through an expedited public comment
process, that such an adjustment is appropriate to achieve
compliance with applicable environmental flow standards adopted
under Section 11.1471. The adjustment:

(1) in combination with any previous adjustments made
under this subsection may not increase the amount of the pass-
through or release requirement for the protection of instream
flows or freshwater inflows by more than 12.5 percent of the
annualized total of that requirement contained in the permit as
issued or of that requirement contained in the amended water
right and applicable only to the increase in the amount of water
authorized to be stored, taken, or diverted under the amended
water right;

(2) must be based on appropriate consideration of the
priority dates and diversion locations of any other water rights

granted in the same river basin that are subject to adjustment under this subsection; and

(3) must be based on appropriate consideration of any voluntary contributions to the Texas Water Trust, and of any voluntary amendments to existing water rights to change the use of a specified quantity of water to or add a use of a specified quantity of water for instream flows dedicated to environmental needs or bay and estuary inflows as authorized by Section 11.0237(a), that actually contribute toward meeting the applicable environmental flow standards.

(e-2) Any water right holder who makes a contribution or amends a water right as described by Subsection (e-1)(3) is entitled to appropriate credit for the benefits of the contribution or amendment against the adjustment of the holder's water right under Subsection (e-1).

(e-3) Notwithstanding Subsections (b)-(e), for the purpose of determining the environmental flow conditions necessary to maintain freshwater inflows to an affected bay and estuary system, existing instream uses and water quality of a stream or river, or fish and aquatic wildlife habitats, the commission shall apply any applicable environmental flow standard, including any environmental flow set-aside, adopted under Section 11.1471 instead of considering the factors specified by those subsections.

SECTION 1.14. Subchapter D, Chapter 11, Water Code, is amended by adding Section 11.1471 to read as follows:

Sec. 11.1471. ENVIRONMENTAL FLOW STANDARDS AND SET-ASIDES.

(a) The commission by rule shall:

(1) adopt appropriate environmental flow standards for each river basin and bay system in this state that are adequate to support a sound ecological environment, to the maximum extent reasonable considering other public interests and other relevant factors;

(2) establish an amount of unappropriated water, if available, to be set aside to satisfy the environmental flow standards to the maximum extent reasonable when considering human water needs; and

(3) establish procedures for implementing an adjustment of the conditions included in a permit or an amended water right as provided by Sections 11.147(e-1) and (e-2).

(b) In adopting environmental flow standards for a river basin and bay system under Subsection (a)(1), the commission shall consider:

(1) the definition of the geographical extent of the river basin and bay system adopted by the advisory group under Section 11.02362(a) and the definition and designation of the river basin by the board under Section 16.051(c);

(2) the schedule established by the advisory group

under Section 11.02362(d) or (e) for the adoption of environmental flow standards for the river basin and bay system, if applicable;

(3) the environmental flow analyses and the recommended environmental flow regime developed by the applicable basin and bay expert science team under Section 11.02362(m);

(4) the recommendations developed by the applicable basin and bay area stakeholders committee under Section 11.02362(o) regarding environmental flow standards and strategies to meet the flow standards;

(5) any comments submitted by the advisory group to the commission under Section 11.02362(q);

(6) the specific characteristics of the river basin and bay system;

(7) economic factors;

(8) the human and other competing water needs in the river basin and bay system;

(9) all reasonably available scientific information, including any scientific information provided by the science advisory committee; and

(10) any other appropriate information.

(c) Environmental flow standards adopted under Subsection (a)(1) must consist of a schedule of flow quantities, reflecting

seasonal and yearly fluctuations that may vary geographically by specific location in a river basin and bay system.

(d) As provided by Section 11.023, the commission may not issue a permit for a new appropriation or an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted if the issuance of the permit or amendment would impair an environmental flow set-aside established under Subsection (a)(2). A permit for a new appropriation or an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted that is issued after the adoption of an applicable environmental flow set-aside must contain appropriate conditions to ensure protection of the environmental flow set-aside.

(e) An environmental flow set-aside established under Subsection (a)(2) for a river basin and bay system other than the middle and lower Rio Grande must be assigned a priority date corresponding to the date the commission receives environmental flow regime recommendations from the applicable basin and bay expert science team and be included in the appropriate water availability models in connection with an application for a permit for a new appropriation or for an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted.

(f) An environmental flow standard or environmental flow

set-aside adopted under Subsection (a) may be altered by the commission in a rulemaking process undertaken in accordance with a schedule established by the commission. In establishing a schedule, the commission shall consider the applicable work plan approved by the advisory group under Section 11.02362(p). The commission's schedule may not provide for the rulemaking process to occur more frequently than once every 10 years unless the work plan provides for a periodic review under Section 11.02362(p) to occur more frequently than once every 10 years. In that event, the commission may provide for the rulemaking process to be undertaken in conjunction with the periodic review if the commission determines that schedule to be appropriate. A rulemaking process undertaken under this subsection must provide for the participation of stakeholders having interests in the particular river basin and bay system for which the process is undertaken.

SECTION 1.15. The heading to Section 11.148, Water Code, is amended to read as follows:

Sec. 11.148. EMERGENCY SUSPENSION OF PERMIT CONDITIONS AND EMERGENCY AUTHORITY TO MAKE AVAILABLE WATER SET ASIDE FOR ENVIRONMENTAL FLOWS.

SECTION 1.16. Section 11.148, Water Code, is amended by adding Subsection (a-1) and amending Subsections (b) and (c) to read as follows:

(a-1) State water that is set aside by the commission to meet the needs for freshwater inflows to affected bays and estuaries and instream uses under Section 11.1471(a)(2) may be made available temporarily for other essential beneficial uses if the commission finds that an emergency exists that cannot practically be resolved in another way.

(b) Before the commission suspends a permit condition under Subsection (a) or makes water available temporarily under Subsection (a-1) [of this section], it must give written notice to the Parks and Wildlife Department of the proposed action [suspension]. The commission shall give the Parks and Wildlife Department an opportunity to submit comments on the proposed action [suspension] within 72 hours from such time and the commission shall consider those comments before issuing its order implementing the proposed action [imposing the suspension].

(c) The commission may suspend the permit condition under Subsection (a) or make water available temporarily under Subsection (a-1) without notice to any other interested party other than the Parks and Wildlife Department as provided by Subsection (b) [of this section]. However, all affected persons shall be notified immediately by publication, and a hearing to determine whether the suspension should be continued shall be held within 15 days of the date on which the order to suspend is

issued.

SECTION 1.17. Subsection (a), Section 11.1491, Water Code, is amended to read as follows:

(a) The Parks and Wildlife Department and the commission shall have joint responsibility to review the studies prepared under Section 16.058 [~~of this code~~], to determine inflow conditions necessary for the bays and estuaries, and to provide information necessary for water resources management. Each agency shall designate an employee to share equally in the oversight of the program. Other responsibilities shall be divided between the Parks and Wildlife Department and the commission to maximize present in-house capabilities of personnel and to minimize costs to the state. Each agency shall have reasonable access to all information produced by the other agency. Publication of reports completed under this section shall be submitted for comment to [~~both~~] the commission, [~~and~~] the Parks and Wildlife Department, the advisory group, the science advisory committee, and any applicable basin and bay area stakeholders committee and basin and bay expert science team.

SECTION 1.18. Subsection (g), Section 11.329, Water Code, is amended to read as follows:

(g) The commission may not assess costs under this section against a holder of a non-priority hydroelectric right that owns

or operates privately owned facilities that collectively have a capacity of less than two megawatts or against a holder of a water right placed in the Texas Water Trust for a term of at least 20 years. [~~This subsection is not intended to affect in any way the fees assessed on a water right holder by the commission under Section 1.29(d), Chapter 626, Acts of the 73rd Legislature, Regular Session, 1993. For purposes of Section 1.29(d), Chapter 626, Acts of the 73rd Legislature, Regular Session, 1993, a holder of a non-priority hydroelectric right that owns or operates privately owned facilities that collectively have a capacity of less than two megawatts shall be assessed fees at the same rate per acre-foot charged to a holder of a non-priority hydroelectric right that owns or operates privately owned facilities that collectively have a capacity of more than two megawatts.~~]

SECTION 1.19. Subsection (e), Section 11.404, Water Code, is amended to read as follows:

(e) The court may not assess costs and expenses under this section against:

(1) a holder of a non-priority hydroelectric right that owns or operates privately owned facilities that collectively have a capacity of less than two megawatts; or

(2) a holder of a water right placed in the Texas Water Trust for a term of at least 20 years.

SECTION 1.20. Subchapter I, Chapter 11, Water Code, is amended by adding Section 11.4531 to read as follows:

Sec. 11.4531. WATERMASTER ADVISORY COMMITTEE. (a) For each river basin or segment of a river basin for which the executive director appoints a watermaster under this subchapter, the executive director shall appoint a watermaster advisory committee consisting of at least nine but not more than 15 members. A member of the advisory committee must be a holder of a water right or a representative of a holder of a water right in the river basin or segment of the river basin for which the watermaster is appointed. In appointing members to the advisory committee, the executive director shall consider:

- (1) geographic representation;
- (2) amount of water rights held;
- (3) different types of holders of water rights and users, including water districts, municipal suppliers, irrigators, and industrial users; and
- (4) experience and knowledge of water management practices.

(b) An advisory committee member is not entitled to reimbursement of expenses or to compensation.

(c) An advisory committee member serves a two-year term expiring August 31 of each odd-numbered year and holds office until a successor is appointed.

(d) The advisory committee shall meet within 30 days after the date the initial appointments have been made and shall select a presiding officer to serve a one-year term. The committee shall meet regularly as necessary.

(e) The advisory committee shall:

(1) make recommendations to the executive director regarding activities of benefit to the holders of water rights in the administration and distribution of water to holders of water rights in the river basin or segment of the river basin for which the watermaster is appointed;

(2) review and comment to the executive director on the annual budget of the watermaster operation; and

(3) perform other advisory duties as requested by the executive director regarding the watermaster operation or as requested by holders of water rights and considered by the committee to benefit the administration of water rights in the river basin or segment of the river basin for which the watermaster is appointed.

SECTION 1.21. Sections 11.454 and 11.455, Water Code, are amended to read as follows:

Sec. 11.454. DUTIES AND AUTHORITY OF THE WATERMASTER. Section 11.327 applies to the duties and authority of a watermaster appointed for a river basin or segment of a river basin under this subchapter in the same manner as that section

applies to the duties and authority of a watermaster appointed for a water division under Subchapter G [~~A watermaster as the agent of the commission and under the executive director's supervision shall:~~

~~[(1) divide the water of the streams or other sources of supply of his segment or basin in accordance with the authorized water rights;~~

~~[(2) regulate or cause to be regulated the controlling works of reservoirs and diversion works in time of water shortage, as is necessary because of the rights existing in the streams of his segment or basin, or as is necessary to prevent the waste of water or its diversion, taking, storage, or use in excess of the quantities to which the holders of water rights are lawfully entitled; and~~

~~[(3) perform any other duties and exercise any authority directed by the commission].~~

Sec. 11.455. COMPENSATION AND EXPENSES OF WATERMASTER [~~ASSESSMENTS~~]. (a) Section 11.329 applies to the payment of the compensation and expenses of a watermaster appointed for a river basin or segment of a river basin under this subchapter in the same manner as that section applies to the payment of the compensation and expenses of a watermaster appointed for a water division under Subchapter G.

(b) The executive director shall deposit the assessments

collected under this section to the credit of the watermaster fund.

(c) Money deposited under this section to the credit of the watermaster fund may be used only for the purposes specified by Section 11.3291 with regard to the watermaster operation under this subchapter with regard to which the assessments were collected ~~[The commission may assess the costs of the watermaster against all persons who hold water rights in the river basin or segment of the river basin under the watermaster's jurisdiction in accordance with Section 11.329 of this code].~~

SECTION 1.22. Subchapter F, Chapter 15, Water Code, is amended by adding Section 15.4063 to read as follows:

Sec. 15.4063. ENVIRONMENTAL FLOWS FUNDING. The board may authorize the use of money in the research and planning fund:

(1) to compensate the members of the Texas environmental flows science advisory committee established under Section 11.02361 for attendance and participation at meetings of the committee and for transportation, meals, lodging, or other travel expenses associated with attendance at those meetings as provided by the General Appropriations Act;

(2) for contracts with cooperating state and federal agencies and universities and with private entities as necessary to provide technical assistance to enable the Texas

environmental flows science advisory committee and the basin and bay expert science teams established under Section 11.02362 to perform their statutory duties;

(3) to compensate the members of the basin and bay expert science teams established under Section 11.02362 for attendance and participation at meetings of the basin and bay expert science teams and for transportation, meals, lodging, or other travel expenses associated with attendance at those meetings as provided by the General Appropriations Act; and

(4) for contracts with political subdivisions designated as representatives of basin and bay area stakeholders committees established under Section 11.02362 to fund all or part of the administrative expenses incurred in conducting meetings of the basin and bay area stakeholders committees or the pertinent basin and bay expert science teams.

SECTION 1.23. Subsection (d), Section 16.059, Water Code, is amended to read as follows:

(d) The priority studies shall be completed not later than December 31, 2016 [~~2010~~]. The Parks and Wildlife Department, the commission, and the board shall establish a work plan that prioritizes the studies and that sets interim deadlines providing for publication of flow determinations for individual rivers and streams on a reasonably consistent basis throughout the prescribed study period. Before publication, completed

studies shall be submitted for comment to the commission, the board, and the Parks and Wildlife Department.

SECTION 1.24. Subsection (h), Section 26.0135, Water Code, as amended by Chapters 234 and 965, Acts of the 77th Legislature, Regular Session, 2001, is reenacted and amended to read as follows:

(h) The commission shall apportion, assess, and recover the reasonable costs of administering the water quality management programs under this section from users of water and wastewater permit holders in the watershed according to the records of the commission generally in proportion to their right, through permit or contract, to use water from and discharge wastewater in the watershed. Irrigation water rights, and non-priority hydroelectric rights of a water right holder that owns or operates privately owned facilities that collectively have a capacity of less than two megawatts, and water rights held in the Texas Water Trust for terms of at least 20 years will not be subject to this assessment. The cost to river authorities and others to conduct water quality monitoring and assessment shall be subject to prior review and approval by the commission as to methods of allocation and total amount to be recovered. The commission shall adopt rules to supervise and implement the water quality monitoring, assessment, and associated costs. The rules shall ensure that water users and

wastewater dischargers do not pay excessive amounts, that program funds are equitably apportioned among basins, that a river authority may recover no more than the actual costs of administering the water quality management programs called for in this section, and that no municipality shall be assessed cost for any efforts that duplicate water quality management activities described in Section 26.177 [~~of this chapter~~]. The rules concerning the apportionment and assessment of reasonable costs shall provide for a recovery of not more than \$5,000,000 annually. Costs recovered by the commission are to be deposited to the credit of the water resource management account and may be used only to accomplish the purposes of this section. The commission may apply not more than 10 percent of the costs recovered annually toward the commission's overhead costs for the administration of this section and the implementation of regional water quality assessments. The commission, with the assistance and input of each river authority, shall file a written report accounting for the costs recovered under this section with the governor, the lieutenant governor, and the speaker of the house of representatives on or before December 1 of each even-numbered year.

SECTION 1.25. Subsection (b), Section 11.1491, Water Code, is repealed.

SECTION 1.26. (a) The governor, lieutenant governor, and

speaker of the house of representatives shall appoint the initial members of the environmental flows advisory group as provided by Section 11.0236, Water Code, as added by this article, as soon as practicable on or after the effective date of this Act.

(b) As soon as practicable after taking office, the initial members of the environmental flows advisory group shall appoint the initial members of the Texas environmental flows science advisory committee as provided by Section 11.02361, Water Code, as added by this article. The terms of the initial members of the committee expire March 1, 2012.

(c) The environmental flows advisory group shall appoint the members of each basin and bay area stakeholders committee as provided by Section 11.02362, Water Code, as added by this article. The terms of the initial members of each committee expire March 1 of the fifth year that begins after the year in which the initial appointments are made.

(d) Each basin and bay area stakeholders committee shall appoint the members of the basin and bay expert science team for the river basin and bay system for which the committee is established as provided by Section 11.02362, Water Code, as added by this article. The terms of the initial members of each team expire April 1 of the fifth year that begins after the year in which the initial appointments are made.

(e) The executive director of the Texas Commission on Environmental Quality shall appoint the members of the watermaster advisory committee under Section 11.4531, Water Code, as added by this article, for each river basin or segment of a river basin for which the executive director appoints a watermaster under Subchapter I, Chapter 11, Water Code. The terms of the initial members of each committee expire August 31 of the first odd-numbered year that begins after the year in which the initial appointments are made.

SECTION 1.27. The changes in law made by this article relating to a permit for a new appropriation of water or to an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted apply only to:

(1) water appropriated under a permit for a new appropriation of water the application for which is pending with the Texas Commission on Environmental Quality on the effective date of this Act or is filed with the commission on or after that date; or

(2) the increase in the amount of water authorized to be stored, taken, or diverted under an amendment to an existing water right that increases the amount of water authorized to be stored, taken, or diverted and the application for which is pending with the Texas Commission on Environmental Quality on

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the effective date of this Act or is filed with the commission on or after that date.

ARTICLE 2. WATER CONSERVATION AND PLANNING

SECTION 2.01. Section 1.003, Water Code, is amended to read as follows:

Sec. 1.003. PUBLIC POLICY. It is the public policy of the state to provide for the conservation and development of the state's natural resources, including:

(1) the control, storage, preservation, and distribution of the state's storm and floodwaters and the waters of its rivers and streams for irrigation, power, and other useful purposes;

(2) the reclamation and irrigation of the state's arid, semiarid, and other land needing irrigation;

(3) the reclamation and drainage of the state's overflowed land and other land needing drainage;

(4) the conservation and development of its forest, water, and hydroelectric power;

(5) the navigation of the state's inland and coastal waters; ~~and~~

(6) the maintenance of a proper ecological environment of the bays and estuaries of Texas and the health of related living marine resources; and

(7) the voluntary stewardship of public and private

lands to benefit waters of the state.

SECTION 2.02. Subchapter A, Chapter 1, Water Code, is amended by adding Section 1.004 to read as follows:

Sec. 1.004. FINDINGS AND POLICY REGARDING LAND STEWARDSHIP. (a) The legislature finds that voluntary land stewardship enhances the efficiency and effectiveness of this state's watersheds by helping to increase surface water and groundwater supplies, resulting in a benefit to the natural resources of this state and to the general public. It is therefore the policy of this state to encourage voluntary land stewardship as a significant water management tool.

(b) "Land stewardship," as used in this code, is the voluntary practice of managing land to conserve or enhance suitable landscapes and the ecosystem values of the land. Land stewardship includes land and habitat management, wildlife conservation, and watershed protection. Land stewardship practices include runoff reduction, prescribed burning, managed grazing, brush management, erosion management, reseeding with native plant species, riparian management and restoration, and spring and creek-bank protection, all of which benefit the water resources of this state.

SECTION 2.03. Section 11.002, Water Code, is amended by adding Subdivision (20) to read as follows:

(20) "Best management practices" means those

voluntary efficiency measures developed by the commission and the board that save a quantifiable amount of water, either directly or indirectly, and that can be implemented within a specified time frame.

SECTION 2.04. Subchapter E, Chapter 13, Water Code, is amended by adding Section 13.146 to read as follows:

Sec. 13.146. WATER CONSERVATION PLAN. The commission shall require a retail public utility that provides potable water service to a population of 3,300 or more to submit to the executive administrator of the board a water conservation plan based on specific targets and goals developed by the retail public utility and using appropriate best management practices, as defined by Section 11.002, or other water conservation strategies. For purposes of this section, the population served by a retail public utility shall be determined on the basis of the population estimates contained in the most recent regional water plan adopted for the regional water planning area in which the retail public utility's service area is located.

SECTION 2.05. Subsection (b), Section 15.102, Water Code, is amended to read as follows:

(b) The loan fund may also be used by the board to provide:

(1) grants or loans for projects that include supplying water and wastewater services in economically

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distressed areas or nonborder colonias as provided by legislative appropriations, this chapter, and board rules, including projects involving retail distribution of those services; and

(2) grants for:

(A) projects for which federal grant funds are placed in the loan fund;

(B) projects, on specific legislative appropriation for those projects; or

(C) water conservation, desalination, brush control, weather modification, regionalization, and projects providing regional water quality enhancement services as defined by board rule, including regional conveyance systems.

SECTION 2.06. Subchapter Q, Chapter 15, Water Code, is amended by adding Section 15.9751 to read as follows:

Sec. 15.9751. PRIORITY FOR WATER CONSERVATION. The board shall give priority to applications for funds for the implementation of water supply projects in the state water plan by entities that:

(1) have already demonstrated significant water conservation savings; or

(2) will achieve significant water conservation savings by implementing the proposed project for which the financial assistance is sought.

SECTION 2.07. Subsection (h), Section 16.053, Water Code, is amended by adding Subdivisions (10) and (11) to read as follows:

(10) The regional water planning group may amend the regional water plan after the plan has been approved by the board. Subdivisions (1)-(9) apply to an amendment to the plan in the same manner as those subdivisions apply to the plan.

(11) This subdivision applies only to an amendment to a regional water plan approved by the board. This subdivision does not apply to the adoption of a subsequent regional water plan for submission to the board as required by Subsection (i). Notwithstanding Subdivision (10), the regional water planning group may amend the plan in the manner provided by this subdivision if the executive administrator determines that the amendment qualifies for adoption in the manner provided by this subdivision before the regional water planning group votes on adoption of the amendment. An amendment qualifies for adoption in the manner provided by this subdivision only if the amendment will not result in the overallocation of any existing or planned source of water, does not relate to a new reservoir, and will not have a significant effect on instream flows or freshwater inflows to bays and estuaries. If the executive administrator determines that an amendment qualifies for adoption in the manner provided by this subdivision, the regional water planning

group may adopt the amendment at a public meeting held in accordance with Chapter 551, Government Code. The amendment must be placed on the agenda for the meeting, and notice of the meeting must be given in the manner provided by Chapter 551, Government Code, at least two weeks before the date the meeting is held. The public must be provided an opportunity to comment on the amendment at the meeting.

SECTION 2.08. Subsection (r), Section 16.053, Water Code, as added by Chapter 1097, Acts of the 79th Legislature, Regular Session, 2005, is amended to read as follows:

(r) The board by rule shall provide for reasonable flexibility to allow for a timely amendment of a regional water plan, the board's approval of an amended regional water plan, and the amendment of the state water plan. If an amendment under this subsection is~~is~~ to facilitate planning for water supplies reasonably required for a clean coal project, as defined by Section 5.001, the~~the~~ rules may allow for amending a regional water plan without providing notice and without a public meeting or hearing under Subsection (h) if the amendment does not:

(1) significantly change the regional water plan, as reasonably determined by the board; or

(2) adversely affect other water management strategies in the regional water plan.

SECTION 2.09. Subchapter E, Chapter 16, Water Code, is amended by adding Section 16.1311 to read as follows:

Sec. 16.1311. PRIORITY FOR WATER CONSERVATION. The board shall give priority to applications for funds for implementation of water supply projects in the state water plan by entities that:

(1) have already demonstrated significant water conservation savings; or

(2) will achieve significant water conservation savings by implementing the proposed project for which the financial assistance is sought.

SECTION 2.10. Chapter 16, Water Code, is amended by adding Subchapter K to read as follows:

SUBCHAPTER K. WATER CONSERVATION

Sec. 16.401. STATEWIDE WATER CONSERVATION PUBLIC AWARENESS PROGRAM. (a) The executive administrator shall develop and implement a statewide water conservation public awareness program to educate residents of this state about water conservation. The program shall take into account the differences in water conservation needs of various geographic regions of the state and shall be designed to complement and support existing local and regional water conservation programs.

(b) The executive administrator is required to develop and implement the program required by Subsection (a) in a state

fiscal biennium only if the legislature appropriates sufficient money in that biennium specifically for that purpose.

Sec. 16.402. WATER CONSERVATION PLAN REVIEW. (a) Each entity that is required to submit a water conservation plan to the commission under this code shall submit a copy of the plan to the executive administrator.

(b) Each entity that is required to submit a water conservation plan to the executive administrator, board, or commission under this code shall report annually to the executive administrator on the entity's progress in implementing the plan.

(c) The executive administrator shall review each water conservation plan and annual report to determine compliance with the minimum requirements established by Section 11.1271 and the submission deadlines developed under Subsection (e) of this section.

(d) The board may notify the commission if the board determines that an entity has violated this section or a rule adopted under this section. Notwithstanding Section 7.051(b), a violation of this section or of a rule adopted under this section is enforceable in the manner provided by Chapter 7 for a violation of a provision of this code within the commission's jurisdiction or of a rule adopted by the commission under a provision of this code within the commission's jurisdiction.

(e) The board and commission jointly shall adopt rules:

(1) identifying the minimum requirements and submission deadlines for the annual reports required by Subsection (b); and

(2) providing for the enforcement of this section and rules adopted under this section.

SECTION 2.11. Section 17.125, Water Code, is amended by adding Subsection (b-2) to read as follows:

(b-2) The board shall give priority to applications for funds for implementation of water supply projects in the state water plan by entities that:

(1) have already demonstrated significant water conservation savings; or

(2) will achieve significant water conservation savings by implementing the proposed project for which the financial assistance is sought.

SECTION 2.12. Chapter 35, Water Code, is amended by adding Section 35.020 to read as follows:

Sec. 35.020. PUBLIC PARTICIPATION IN GROUNDWATER MANAGEMENT PROCESS. It is the policy of the state to encourage public participation in the groundwater management process in areas within a groundwater management area not represented by a groundwater conservation district.

SECTION 2.13. Subsection (b), Section 212.0101, Local

Government Code, is amended to read as follows:

(b) The Texas [~~Natural Resource Conservation~~] Commission on Environmental Quality by rule shall establish the appropriate form and content of a certification to be attached to a plat application under this section.

SECTION 2.14. Subsection (b), Section 232.0032, Local Government Code, is amended to read as follows:

(b) The Texas [~~Natural Resource Conservation~~] Commission on Environmental Quality by rule shall establish the appropriate form and content of a certification to be attached to a plat application under this section.

SECTION 2.15. (a) Chapter 9, Water Code, is repealed.

(b) The Texas Water Advisory Council is abolished on the effective date of this article.

SECTION 2.16. Sections 15.102 and 17.125, Water Code, as amended by this article, and Sections 15.9751 and 16.1311, Water Code, as added by this article, apply only to an application for financial assistance filed with the Texas Water Development Board on or after the effective date of this article. An application for financial assistance filed before the effective date of this article is governed by the law in effect on the date the application was filed, and the former law is continued in effect for that purpose.

ARTICLE 3. UNIQUE RESERVOIR SITES AND SITES OF UNIQUE

ECOLOGICAL VALUE

SECTION 3.01. LEGISLATIVE FINDINGS. The legislature finds that:

(1) the development of new water supplies to meet the growing demand for water is necessary for the sound economic development of this state and is of concern and importance to this state;

(2) feasible sites for new reservoirs are identified as having unique value in the 2006 regional water plans and the 2007 state water plan;

(3) most of the proposed reservoirs are also part of recommended strategies for fulfilling identified needs in the 2007 state water plan that may occur as early as 2010 and 2020;

(4) it is necessary to preempt actions that could circumvent the state's primacy over surface water in the state; and

(5) designation of these sites as unique reservoir sites or river or stream segments of unique ecological value is necessary for the sound economic development of this state, for the protection of natural resources, and for the purpose of promoting the public health, safety, and general welfare of this state.

SECTION 3.02. DESIGNATION OF UNIQUE RESERVOIR SITES. The legislature, as authorized by Subsection (g), Section 16.051,

Water Code, designates the following sites as having unique value for the construction of a dam and reservoir and further determines that the sites are necessary to meet water supply needs:

(1) Lower Bois d'Arc reservoir, to be located on Bois d'Arc Creek in Fannin County, upstream from the Caddo National Grasslands Wildlife Management Area;

(2) Lake Ralph Hall reservoir, to be located on the North Sulphur River in southeast Fannin County, north of the city of Ladonia;

(3) Marvin Nichols reservoir, to be located on the Sulphur River upstream from its confluence with White Oak Creek; the dam will be located in Titus and Red River Counties and the reservoir will also impound water in Franklin County;

(4) Lake Fastrill reservoir, to be located on the Neches River in Anderson and Cherokee Counties, downstream from Lake Palestine;

(5) Tehuacana Creek reservoir, to be located on Tehuacana Creek in Freestone County, south of the Richland-Chambers reservoir, with the two lakes to be connected by a channel;

(6) Bediares reservoir, to be located on both Bediares and Caney Creeks in portions of Grimes, Madison, and Walker Counties;

(7) Brushy Creek reservoir, to be located near the city of Marlin in central Falls County;

(8) Little River reservoir, to be located on the Little River upstream from its confluence with the Brazos River in Milam County;

(9) Little River off-channel reservoir, to be located northwest of the city of Milano in Milam County, on Beaver Creek, a tributary of the Little River;

(10) Texana Stage II reservoir, also known as Palmetto Bend, to be located on the Lavaca River in Jackson County above the confluence with the Navidad River;

(11) Goldthwaite channel dam reservoir, to be located on the Colorado River west of the city of Goldthwaite and downstream from the existing diversion structure;

(12) Wheeler Branch off-channel reservoir, to be located on the Wheeler Branch tributary of the Paluxy River and north of the city of Glen Rose in Somervell County;

(13) Cedar Ridge reservoir, to be located on the Clear Fork of the Brazos River upstream from its confluence with Paint Creek and in Throckmorton, Shackelford, and Haskell Counties;

(14) Lake 07 reservoir, to be located in southeastern Lubbock County, to impound developed water resources discharged into Yellowhouse Canyon as part of the Canyon Lakes System, also

known as the Jim Bertram Lake System;

(15) Lake 08 reservoir, to be located in southeastern Lubbock County, to impound developed water resources discharged into Yellowhouse Canyon as part of the Canyon Lakes System, also known as the Jim Bertram Lake System;

(16) Nueces off-channel reservoir, to be located west of Lake Corpus Christi in south central Live Oak County, to be linked to Lake Corpus Christi by pipeline and operated as part of the Choke Canyon-Lake Corpus Christi reservoir system;

(17) Ringgold reservoir, to be located on the Little Wichita River in Clay County approximately one-half mile upstream from its confluence with the Red River;

(18) Muenster reservoir, to be located on Brushy Elm Creek in western Cooke County; and

(19) Brownsville Weir and reservoir, to be located on the lower Rio Grande in Cameron County; the proposed project consists of a weir structure across the channel of the river approximately eight miles downstream from the city of Brownsville.

SECTION 3.03. DESIGNATION OF SITES OF UNIQUE ECOLOGICAL VALUE. The legislature, as authorized by Subsection (f), Section 16.051, Water Code, designates those river or stream segment sites recommended in the 2007 state water plan as being of unique ecological value.

SECTION 3.04. RESTRICTION ON ELIGIBILITY TO HOLD WATER RIGHTS; LIABILITY FOR CONSTRUCTION, OPERATION, AND MAINTENANCE COSTS. (a) This section applies only to a proposed reservoir listed in Subdivision (3), Section 3.02 of this Act, that is to be located in the Region D Regional Water Planning Area.

(b) The right to appropriate at least 20 percent of the quantity of water that is authorized to be appropriated from each proposed reservoir must be held by one or more entities located in the regional water planning area in which the reservoir is to be located.

(c) If one or more entities located outside the regional water planning area in which a proposed reservoir is to be located are to hold the right to appropriate a majority of the quantity of water that is authorized to be appropriated from the reservoir, that entity or those entities must pay all of the costs of constructing, operating, and maintaining the reservoir until such time as one or more entities located in the regional water planning area in which the reservoir is to be located begins diverting water. At such time, the entity or entities making a diversion shall pay a pro-rata share of the cost of operating and maintaining the reservoir.

SECTION 3.05. STUDY COMMISSION ON REGION C WATER SUPPLY.

(a) The Study Commission on Region C Water Supply is established. The study commission consists of six members as

follows:

(1) three members appointed by the Region C Regional Water Planning Group; and

(2) three members appointed by the Region D Regional Water Planning Group.

(b) A member of the study commission may be, but is not required to be, a voting member of the regional water planning group that appointed the member.

(c) The members of the study commission shall select a presiding officer from among the members.

(d) Members of the study commission are not entitled to compensation for service on the study commission but may be reimbursed for travel expenses incurred while conducting the business of the study commission, as provided for in the General Appropriations Act.

(e) The study commission shall:

(1) review the water supply alternatives available to the Region C Regional Water Planning Area, including obtaining additional water supply from Wright Patman Lake, Toledo Bend Reservoir, Lake Texoma, Lake o' the Pines, and other existing and proposed reservoirs;

(2) in connection with the review under Subdivision (1) of this subsection, analyze the socioeconomic effect on the area where the water supply is located that would result from

the use of the water to meet the water needs of the Region C Regional Water Planning Area, including:

(A) the effects on landowners, agricultural and natural resources, businesses, industries, and taxing entities of different water management strategies; and

(B) in connection with the use by the Region C Regional Water Planning Area of water from Wright Patman Lake, the effect on water availability in that lake and the effect on industries relying on that water availability;

(3) determine whether water demand in the Region C Regional Water Planning Area may be reduced through additional conservation and reuse measures so as to postpone the need for additional water supplies;

(4) evaluate measures that would need to be taken to comply with the mitigation requirements of the United States Army Corps of Engineers in connection with any proposed new reservoirs, including identifying potential mitigation sites;

(5) consider whether the mitigation burden described by Subdivision (4) of this subsection may be shared by the Regions C and D Regional Water Planning Areas in proportion to the allocation to each region of water in any proposed reservoir;

(6) review innovative methods of compensation to affected property owners, including royalties for water stored

on acquired properties and annual payments to landowners for properties acquired for the construction of a reservoir to satisfy future water management strategies;

(7) evaluate the minimum number of surface acres required for the construction of proposed reservoirs in order to develop adequate water supply; and

(8) identify the locations of proposed reservoir sites in the Regions C and D Regional Water Planning Areas using satellite imagery with sufficient resolution to permit land ownership to be determined.

(f) The study commission may not be assisted by any person that is a party to or is employed by a party to a contract to perform engineering work with respect to site selection, permitting, design, or construction of the proposed Marvin Nichols reservoir.

(g) The Texas Water Development Board, on request of the study commission, may provide staff support or other assistance necessary to enable the study commission to carry out its duties. The Texas Water Development Board shall provide funding for the study commission, including funding of any studies conducted by the study commission, from the regional planning budget of the board.

(h) Not later than December 1, 2010, the study commission shall deliver a report to the governor, lieutenant governor, and

speaker of the house of representatives that includes:

- (1) any studies completed by the study commission;
- (2) any legislation proposed by the study commission;
- (3) a recommendation as to whether Marvin Nichols should remain a designated reservoir site; and
- (4) other findings and recommendations of the study commission.

(i) The study commission is abolished and this section expires December 31, 2011.

SECTION 3.06. EFFECTIVE DATE. This article takes effect immediately if this Act receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this article takes effect September 1, 2007.

ARTICLE 4. LEGISLATIVE JOINT INTERIM COMMITTEE

SECTION 4.01. (a) In this section, "committee" means the joint interim committee on state water funding.

(b) The committee is composed of eight members as follows:

- (1) the chair of the Senate Committee on Natural Resources and the chair of the House Committee on Natural Resources who shall serve as joint chairs of the committee;
- (2) three members of the senate appointed by the lieutenant governor; and

(3) three members of the house of representatives appointed by the speaker of the house of representatives.

(c) An appointed member of the committee serves at the pleasure of the appointing official.

(d) The committee shall meet at least annually with the executive director of the Texas Commission on Environmental Quality and the executive administrator of the Texas Water Development Board to:

(1) receive information on water infrastructure needs as identified in the state water plan;

(2) receive information on infrastructure cost and funding options to be used by local entities to meet the needs identified in the state water plan;

(3) receive analyses of the funding gap and recommendations on how to address those funding needs;

(4) receive information on whether all water fees assessed are sufficient to support the required regulatory water-related state program functions and activities; and

(5) identify viable, sustainable, dedicated revenues and fee sources, or increases to existing revenue and fees, to support state water programs and to provide for natural resources data collection and dissemination, financial assistance programs, and water resources planning, including funding to implement water management strategies in the state

water plan.

(e) The committee may hold hearings and may request reports and other information from state agencies as necessary to carry out this section.

(f) The Senate Committee on Natural Resources and the House Committee on Natural Resources shall provide staff necessary for the committee to fulfill its duties.

(g) Not later than December 1, 2008, the committee shall report to the governor, the lieutenant governor, and the speaker of the house of representatives on the committee's activities under Subsection (d) of this section. The report shall include recommendations of any legislative action necessary to address funding needs to support the state's water programs and water infrastructure needs.

ARTICLE 5. EFFECTIVE DATE

SECTION 5.01. Except as otherwise provided by this Act, this Act takes effect September 1, 2007.

The Texas Commission on Environmental Quality (commission, TCEQ, or agency) adopts the repeal of §§344.1, 344.4, 344.10, 344.49, 344.58 - 344.63, 344.70 - 344.73, 344.75, 344.77, and 344.90 - 344.96; and adopts new §§344.1, 344.20 - 344.24, 344.30 - 344.38, 344.40 - 344.43, 344.50 - 344.52, 344.60 - 344.65, 344.70 - 344.72, and 344.80.

Sections 344.1, 344.24, 344.30, 344.34 - 344.36, 344.38, 344.43, 344.50 - 344.51, 344.60 - 344.65, 344.70 - 344.72 and 344.80 are adopted *with changes* to the text and will be republished. Sections 344.20 - 344.23, 344.31 - 344.33, 344.37, 344.40 - 344.42, and 344.52 are adopted *without changes* to the proposed text as published in the February 1, 2008, issue of the *Texas Register* (33 TexReg 899) and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The adopted new rules will establish the duties and responsibilities of irrigators, irrigation technicians, and irrigation inspectors; provide clarification for better enforcement; reflect the change in the agency name; update statutory references; and correct grammar and cross-references. The rulemaking implements changes made to Texas Occupations Code, §1903.053 and §1903.251, and the addition of Texas Water Code (TWC), §49.238, and Local Government Code, §401.006, by House Bill (HB) 4, HB 1656, and Senate Bill (SB) 3, 80th Legislature, 2007. This adoption addresses local, state, and national demands for conserving and protecting the state's water resources.

Although technology and conservation methods have evolved over the years, no substantive changes have been incorporated into the existing rules since 1996. The adopted new rules will ensure that the agency's rules are up to date and consistent with statutory standards and help to ensure that the rules are effective.

Because of the number of changes made, repealing the existing rules in their entirety and proposing new rules make the changes easier to present and understand. The adopted new rules are reorganized to provide better readability. The adopted new rules will revise existing criteria for the design, installation, service, and operation of irrigation systems to be consistent with best industry practices and technology.

HB 4/SB 3 directed the commission to adopt rules that govern: 1) the connection of an irrigation system to any water supply; 2) the design, installation, and operation of irrigation systems; 3) water conservation; and 4) the duties and responsibilities of irrigators.

HB 1656 adds a new landscape irrigation license classification, "irrigation inspector," and directs municipalities with populations of 20,000 or more to adopt ordinances that require irrigation system irrigators be licensed by the commission and obtain a permit before installing an irrigation system. Municipalities must adopt standards and specifications for designing, installing, and operating irrigation systems and include any rules adopted by the agency that are related to landscape irrigation.

Municipalities may employ or contract with a licensed plumbing inspector or licensed irrigation inspector to enforce the ordinance. Municipalities may collect a fee to recover costs of the program. Municipalities must exempt on-site sewage systems, agricultural irrigation systems, and irrigation systems connected to a well and used by the property owner for domestic use.

HB 1656 allows water districts to adopt rules that meet the same criteria as municipalities, except that districts may employ or contract with a licensed plumbing inspector, a licensed irrigation inspector, the district's operator, or another governmental entity to enforce the rules. Water districts must exempt on-site

sewage systems, agricultural irrigation systems, and irrigation systems connected to a well and used by the property owner for domestic use.

As required by HB 4, §19 and SB 3, the commission must adopt standards no later than June 1, 2008, with an effective date of January 1, 2009. Therefore, the adopted effective date of the repeal of the existing Chapter 344 and replacement with new Chapter 344 is January 1, 2009.

The existing Chapter 344 is repealed. A new Chapter 344 is adopted and is consistent with HB 4, SB 3, and HB 1656, compatible with best irrigation practices, and that improves readability.

SECTION BY SECTION DISCUSSION

Subchapter A, Definitions

Adopted new §344.1, Definitions, will define air gap; Atmospheric Vacuum Breaker; backflow prevention; backflow prevention assembly; completion of irrigation system installation; consulting; cross-connection; design; design pressure; Double Check Valve; emission device; employed; head-to-head spacing; health hazard; hydraulics; inspector; installer, irrigation inspector; irrigation plan; irrigation services; irrigation system; irrigation technician; irrigation zone; irrigator; irrigator-in-charge, landscape irrigation; license; mainline; maintenance checklist; major maintenance, alteration, repair, or service; master valve; matched precipitation rate; new installation; non-health hazard; non-potable water; pass-through contract; potable water; Pressure Vacuum Breaker; reclaimed water; records of landscape irrigation activities; Reduced Pressure Principle Backflow Prevention Assembly; static water pressure; supervision; water conservation; zone flow; and zone valve. Three definitions in the existing section, "Non-toxic Substance," "Precipitation Zones," and "Toxic Substance" are not being adopted in the new

section because the terms are not used in this chapter. The definition of "Council" in the existing section is not adopted in the new section. The definition is not necessary, because the use of the term "council" in §344.80 means the Irrigator Advisory Council. The definition for design was changed from sprinkler heads to emission devices. The definition of design pressure was adopted with changes. The definition of irrigator-in-charge was clarified to exempt business owners. The definition for irrigation services added the term "selling." The definitions for landscape irrigation, new installation, pass-through contract, records of landscape irrigation activities and zone flow were adopted with changes. The change to "landscape irrigation" clarified the definition. The change to "new installation" removes the phrase that one or more new zones would require an irrigation plan. The change to "records of landscape irrigation activities" removes some of the items to be kept. The change to "zone flow" includes adding gallons per hour and changes the way the flow is determined.

Subchapter B, Standards of Conduct for Irrigators, Installers, Irrigation Technicians, and Irrigation Inspectors, and Local Requirements

Adopted new Subchapter B will establish certain standards of conduct for licensees and establishes requirements for local regulations and inspections. The new Subchapter B incorporates the existing §§344.90 - 344.92 and part of §344.93.

Adopted new §344.20, Purpose of Standards, establishes the reasons for these standards of conduct. The proposal implements changes made to Texas Occupations Code, §1903.053 and §1903.251 and the addition of TWC, §49.238 and Local Government Code, §401.006, by HB 4, SB 3, and HB 1656, 80th Legislature, 2007. Adopted new §344.20 is similar to and update the previous §344.90 to include irrigation inspectors and irrigation technicians.

Adopted new §344.21, Intent, establishes the intent of these standards. It is necessary to prescribe responsibilities of licensees in accordance with Texas Occupations Code, §1903.053(a)(4). The section is similar to the existing §344.91. Specific references to enforcement activities are added by the adopted rule.

Adopted new §344.22, Proficiency in the Field of Irrigation; Representation of Qualifications, establishes the requirement that irrigators, installers, irrigation technicians, and inspectors exhibit knowledge and proficiency when performing irrigation activities. The adopted §344.22 establishes the requirement that irrigators, installers, irrigation technicians, irrigation inspectors, and business owners accurately and truthfully represent their qualifications. The adopted new rule requires irrigators, installers, irrigation technicians, and inspectors to be knowledgeable of local requirements related to landscape irrigation. The requirements are necessary to help ensure efficient irrigation practices.

Adopted new §344.23, Irrigation Practice, prohibits false, misleading or deceptive practices related to irrigation services. The existing rule, §344.93(c), only applies to false, misleading, or deceptive practices related to bidding or advertising of services and fees by irrigators or installers. The adopted new rule adds selling, installing, maintaining, altering, repairing, servicing or inspection to the prohibition. This new requirement is necessary to help ensure efficient irrigation practices.

Adopted new §344.24, Local Regulation and Inspection, establishes that irrigators, installers, irrigation technicians, and inspectors must comply with local requirements, ordinances, and regulations. The existing rule, §344.70, applies to irrigators and installers. The adopted new rule adds irrigation inspectors

and irrigation technicians to the rule. The adopted new rule allows regulatory authorities to inspect irrigation systems connected to their public water systems. The language is similar to existing §344.71, except the existing rule states that it "is not required to be inspected" and the adopted rule states that the system "may" be inspected. The adopted rule requires municipalities with a population of 20,000 or more and water districts that implement irrigation programs to verify that the irrigator that designs and installs an irrigation system holds a valid license and has obtained the necessary permits prior to the installation. These entities may also conduct inspections to verify that the design and installation meet the requirements contained in this chapter or the local ordinance or rules, if more stringent. The adopted rule requires each inspector to maintain a log of inspections for three years. The adopted rule exempts from the inspection requirements a landscape irrigation system that is part of an on-site sewage disposal system, an agricultural operation or is connected to a well used by the property owner for domestic use. It is necessary to set these standards to better enforce the landscape irrigation rules.

Subchapter C, Requirements for Licensed Irrigators, Installers, Irrigation Technicians, and Irrigation Inspectors

Adopted new Subchapter C establishes the duties and responsibilities of irrigators, installers, irrigation technicians, landscape irrigation business owners, and irrigation inspectors. It is necessary to define the responsibilities of those who engage in landscape irrigation in order to provide a better understanding of these responsibilities and to better enforce the landscape irrigation rules. Adopted new Subchapter C incorporates the existing §§344.4, 344.49, and 344.58.

Adopted new §344.30, License Required, requires irrigators, installers, irrigation technicians, and irrigation inspectors to hold a valid license. The requirement in the existing chapter for installers to work

under the supervision of a licensed irrigator when connecting an irrigation system to a water supply continues. The adopted rule establishes an irrigation technician's role on January 1, 2009, to allow the irrigation technician to install, maintain, alter, repair, and service an irrigation system as well as connect an irrigation system to the water supply under the direction of a licensed irrigator. The licensed irrigator is responsible for the work performed by an irrigation technician on a landscape irrigation system. This section also addresses the license requirements for an inspector that may be employed or contracted by a municipality or water district to enforce landscape irrigation ordinances or rules. Adopted new §344.30(c) requires licensed irrigation technicians to be consistent with the licensed irrigation installers. Adopted new §344.30(h) clarifies the requirements that a home or property owner who installs an irrigation system must meet.

Adopted new §344.31, Exemption for Business Owner Who Provides Irrigation Services, establishes the conditions under which a business owner could engage in irrigation activities by employing an irrigator to supervise irrigation activities of the business, as established in Texas Occupations Code, Chapter 1903.

Adopted new §344.32, Responsibilities of a Business Owner Who Provides Irrigation Services places responsibility on the landscape irrigation business owner to ensure landscape irrigation services are supervised by a licensed irrigator serving as the irrigator-in-charge. The business owner is responsible for verifying the validity of the license of any irrigator, installer or irrigation technician working for the business. Because the owner guides the direction of the company, a business owner must ensure irrigation activities are performed in a responsible manner.

Adopted new §344.33, Display of License, makes administrative changes to correct grammar and requires licensees to present their license upon request to any inspector or regulatory authority with authority over landscape irrigation issues in the jurisdiction in which the licensee practices. Additionally, the irrigator, installer, and irrigation technician licensee are accountable to provide proof of licensure when requested by any regulatory authority, irrigation system's owner, or prospective owner. Irrigators, installers, and irrigation technicians are required to display their license at their place of business. The requirement for an irrigation inspector to present the license when requested by a regulatory authority is addressed in this section.

Adopted new §344.34, Use of License, establishes who may use a license and how it may be used. The adopted rule establishes a requirement that an irrigator-in-charge can perform irrigation services at only one entity as an irrigator-in-charge, but may work at other businesses performing irrigation services. The adopted rule includes requirements for the irrigation inspector's use of the license the inspector obtains from the TCEQ. The adopted section was changed to enhance enforceability by replacing the word "may" with "shall" in two places.

Adopted new §344.35, Duties and Responsibilities of Irrigators, establishes that an irrigator is responsible for all permits, contracts, agreements, advertising or other irrigation activity secured and performed using the irrigator's license. The adopted rule requires the irrigator to comply with all of the rules contained in this chapter when performing irrigation work. The adopted rule requires a licensed irrigator to supervise irrigation activities for an unlicensed business owner. It is necessary to set out specific requirements for irrigators doing these irrigation activities because Texas Occupations Code, Chapter 1903, addresses the

duties and responsibilities for landscape irrigation activities. This section has been adopted with changes to separate the responsibilities for irrigators that perform only "design" work and those that only "install."

Adopted new §344.36, Duties and Responsibilities of Installers and Irrigation Technicians, establishes the duties and responsibilities of licensed installers and irrigation technicians. The current duties and responsibilities of installers include connecting irrigation systems to water supplies, and installing an approved backflow prevention method as indicated on the site irrigation plan, or according to the licensed irrigator's instructions. The adopted rule allows an irrigation technician, beginning January 1, 2009, to connect, maintain, alter, repair, service, and direct the installation of an irrigation system under the direct supervision of a licensed irrigator. It is necessary to define the duties and responsibilities of irrigation technicians to help ensure the safe and efficient operation of the irrigation system. This section has been adopted with changes to allow an irrigation technician to perform the final walk through or explain the Maintenance checklist to the irrigation system owner or owner's representative.

Adopted new §344.37, Duties and Responsibilities of Irrigation Inspectors, establishes that an irrigation inspector must enforce the rules or ordinances of the employing entity. It is necessary to establish the duties and responsibilities of irrigation inspectors to protect the water supply.

Adopted new §344.38, Irrigator, Installer, and Irrigation Technician Records, establishes the requirement that irrigators, installers, and irrigation technicians make all landscape irrigation designs, invoices, contracts, warranties, or other irrigation business records or documents available upon request to any governing authority within ten business days of a request. This change is necessary to help ensure effective enforcement of and compliance with regulations that relate to landscape irrigation. The section

is adopted with changes from the proposed rules, which removes a requirement to keep copies of advertisements and allow ten business days to provide records to the commission or local regulatory authorities.

Subchapter D, Licensed Irrigator Seal

The new subchapter removes the existing requirement for the licensed irrigator to submit a copy of the seal on letterhead or business stationery and to notify the executive director of any changes in the seal or rubber stamp facsimile. The executive director may obtain a copy of the seal or rubber stamp facsimile, if necessary, on a case-by-case basis. A seal is required on the design, irrigation plan and other documents provided to the irrigation system's owner. It is necessary to set requirements for the seal and for use of the seal. The adopted rule incorporates part of existing §344.59.

Adopted new §344.40, Seal Required, requires each licensed irrigator to obtain a seal. The adopted rule prohibits licensed irrigators from engaging in landscape irrigation work until they possess the seal and license. The change is necessary to ensure effective enforcement of and compliance with regulations related to landscape irrigation to protect the water supply.

Adopted new §344.41, Seal Design, prescribes the appearance of a seal. This new section contains requirements identical to those in the existing §344.60, except that the new section explains that the license number on the seal does not need to contain the leading zeros. The adopted rule requires the irrigator to be responsible for the security of the seal. The adopted rule better explains the seal requirements.

Adopted new §344.42, Seal Display, prescribes that the seal or electronic seal and signature be visible and legible on the original document and when the document is copied or reproduced. The adopted rule incorporates parts of §344.60 and addresses new technology. It is necessary to explain the responsibilities of a licensed irrigator in displaying the seal on documents.

Adopted new §344.43, Seal Use, established the required uses of a seal. Grammatical changes were made from the existing rule. The change in structure simplifies the section. The section also required irrigators to sign their legal name and affix their seal on documents presented to irrigation system owners or the owner's representative. The adopted rule requires the irrigator to accept responsibility for documents that have the seal, and for work performed in accordance with the sealed document. The adopted rule ensures that systems are properly installed in accordance with rules and ordinances. The adopted rule requires irrigators to maintain a copy of all sealed documents for three years. The adopted rule requires that once a seal is utilized on a document, the seal cannot be altered. The adopted rule describes how a seal could be used on a design or specification created by another irrigator. The adopted rule contains a new requirement that the irrigator sign below the seal rather than over the seal. The adopted change makes the irrigator's signature more legible. The adopted rule replaces existing §§344.61 - 344.63. It is necessary to explain the responsibilities of a licensed irrigator in using the seal on documents. The section was adopted with changes to indicate that the presence of the irrigator's seal indicates the acceptance of professional responsibility for the document and references to a "design" were changed to "plan."

Subchapter E, Backflow Prevention and Cross-Connections

Adopted new §344.50, Backflow Prevention Methods, establishes a requirement that all irrigation systems connected to potable water supplies be connected through an approved backflow prevention

method. The adopted new section describes the types of backflow prevention methods that are approved, the conditions of use, and installation standards. The change in structure from the existing chapter improves the section's readability and help to ensure the protection of water supplies. This section replaces existing §344.73. The changes provides irrigators, installers and irrigation technicians with a central location to determine which types of backflow prevention assemblies are appropriate for use in specific irrigation applications in Texas.

Adopted new §344.50(a) establishes the requirements for approved backflow prevention methods and their installation. The adopted rule also includes methods to determine which manufacturer's equipment, model, size, and method of installation are approved for use in the United States.

Adopted new §344.50(b) establishes the backflow prevention methods that are to be used in conditions that present a health hazard, and prescribe how the device must be installed. The standards are necessary to help ensure the protection of water supplies.

Adopted new §344.50(c) explains that a backflow prevention device used in a landscape irrigation system designated as a health hazard must be inspected upon installation and annually thereafter. This requirement is in §290.44(h)(4) of this title and is included in this chapter as a convenience. Inclusion of the rule in this chapter better informs irrigators and irrigation system owners of backflow prevention requirements.

Adopted new §344.50(d) establishes when and how a double check valve backflow prevention assembly may be used and would allow the assembly to be used under conditions that do not present a health

hazard. It is necessary to provide specific information in the use of a double check valve to help ensure proper use and to protect the water supply.

Adopted new §344.50(e) establishes certain installation requirements when a double check valve is installed below ground. This section was adopted with the change of the location of the y-type strainer to the inlet side. The proposal included a new provision that requires a clearance between any fill material and the bottom and the sides of the double check valve to allow for testing and repair. The proposal required the installation of a y-type strainer on the discharge side of the double check valve. The standards are necessary to help ensure the protection of water supplies.

Adopted new §344.51, Specific Conditions and Cross-Connection Control, replaces existing §344.75, and establishes specific conditions relating to cross connections and prescribes the requirements in different situations. The identification of these conditions is necessary to help ensure the protection of water supplies. Additionally, the title change more accurately reflects the subject matter of the section.

Adopted new §344.51(a) establishes the approved backflow prevention methods when chemicals are added to the water in the irrigation system. This requirement is necessary for the protection of water supplies and for consistency with 30 TAC Chapter 290, Public Drinking Water. In response to comments, an air gap was added as an acceptable backflow prevention method.

Adopted new §344.51(b) requires that a reduced pressure principle backflow prevention assembly device or air gap must be used on each potable water source when a potable and non-potable water source supply water to an irrigation system. This requirement is necessary for the protection of water supplies and for

consistency with Chapter 290. In response to comments, the section was changed to allow the use of multiple water sources in an irrigation system.

Adopted new §344.51(c) establishes that irrigation system components utilizing chemical additives must be connected to a potable water system using a reduced pressure principle backflow prevention assembly. This adopted section also clarified how a chemical could be added to an irrigation system.

Adopted new §344.51(d) establishes specific requirements and limitations for irrigation systems that are located on property that is served by an on-site sewage facility. Specific requirements that relate to the design and installation of an irrigation system that is located on property that is served by an on-site sewage facility system are necessary for the preservation of the health and safety of the public. The adopted section changed "on site" to "on-site" for consistency with the remainder of the chapter.

Adopted new §344.52, Installation of Backflow Prevention Device, describes how and when backflow prevention devices should be installed. The requirements help protect the water supply.

Adopted new §344.52(a) requires backflow protection devices be installed on existing irrigation systems that do not have an approved backflow prevention method when certain maintenance, alterations, repairs, or service are made to the irrigation system. These systems could potentially contaminate water supplies and pose a health and safety risk.

Adopted new §344.52(b) prohibits, if used, the installation of a master valve upstream of backflow prevention devices. The installation of an automatic master valve upstream of a backflow prevention assembly could prevent accurate testing of the backflow prevention device, as is required in Chapter 290.

Adopted new §344.52(c) refers to "in service" to be defined as when the irrigation system and backflow prevention device is fully operational after being successfully tested and verified as acceptable for use.

Subchapter F, Standards for Designing, Installing, and Maintaining Landscape Irrigation Systems

Adopted new §344.60, Water Conservation, promotes water conservation practices in the field of irrigation. The adopted requirement adds that systems must also be operated to promote water conservation in addition to those requirements in the existing §344.72. The operation of irrigation systems affects the water efficiency of a system. The adopted section contains the correct reference to the definition of water conservation.

Adopted new §344.61, Minimum Standards for the Design of the Irrigation Plan, changes the standards for the design of irrigation systems by removing the requirements for wind derating that are currently in existing §344.77(c). The available industry information for wind derating is inadequate. The requirement for minimum standards for precipitation rates currently in existing §344.77(d) was removed because there are more efficient means to achieve water conservation in irrigation systems. Adopted new §344.61 replaces existing §344.77 and adds new requirements. The change in structure from the existing rule is necessary to improve the readability of the section.

Adopted new §344.61(a) requires an irrigator to prepare an irrigation plan for each new installation site. The adopted rule explains how variances from the original plan must be addressed. The adopted rule requires a paper copy of the plan to be on-site at all times during the installation of the irrigation system. The irrigation plan promotes water conservation. The adopted section allows either a paper or electronic copy of the design plan to be on-site. The adopted section requires the location of all controllers, not just automatic.

Adopted new §344.61(b) requires that the irrigation plan for the proposed irrigation system include a statement of the areas covered and not covered by the irrigation system. A proper design must indicate the intended areas of irrigation. The design of an irrigation system is essential to conserve water.

Adopted new §344.61(c) establishes a list of items that are required in an irrigation plan. The adopted rule requires that the design pressure be provided. It is necessary to provide these requirements for designs because adopted new Subchapter F requires that specific design elements be used to conserve water. The adopted section requires that the location and type of controllers (not just automatic) must be included.

Adopted new §344.62, Minimum Design and Installation Requirements, establishes limitations for the use of component parts in a design. Adopted new §344.62(a) replaces existing §344.77 and adopts new requirements. In order to protect the integrity and efficiency of the irrigation system and reduce risks to human health and the environment, the components of an irrigation system should not be used in excess of the limitations that are published by the manufacturer. Irrigation plans should not incorporate design elements that would cause a component to be used in a manner that would exceed the limitations published by the manufacturer.

Adopted new §344.62(b) establishes standards for the spacing of emission devices. The adopted rule does not allow spacing of emission devices further apart than the manufacturer's published specifications. To improve water conservation, the rule adopts a new requirement that does not allow the use of spray or rotary sprinkler heads in areas 48 inches or less and that have impervious surfaces on two or more sides. The rule also adopts a new requirement that irrigation system heads are no closer than four inches to a hardscape, such as a foundation, fence, concrete, asphalt, pavers, or stones set with mortar. The adopted new section replaces existing §344.77(a). It is necessary to establish these standards to promote water conservation. The adopted section changes the prohibition of emission devices in landscapes of four feet and clarifies that the measurement may not include impervious surfaces. The adopted section changes the phrase "sprinkler heads" to "emissions devices" for consistency, and provides an exception for small paved areas such as narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public area that have runoff that drains into a landscaped area.

Adopted new §344.62(c) establishes the requirement that the design and installation of an irrigation system's emission components must ensure that they operate within the manufacturer's published operating pressure range. Irrigation plans would be required to use emission devices that would operate at the minimum and not above the maximum sprinkler head pressure published by the manufacturer. The new section replaces existing §344.77(b). This standard is necessary because systems that operate above or below the recommended operating pressure are inefficient and are prone to either waste water or to result in insufficient irrigation.

Adopted new §344.62(d) requires the design and installation of irrigation systems so that water flow in the pipes could not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe. The excessive velocity of flow can cause damage to components of the irrigation system, thus wasting water.

Adopted new §344.62(e) establishes a requirement for irrigation systems to have separate irrigation zones based on factors such as microclimate, plant material type, topographic features, soil conditions, and hydrological control. Separate zones promote water conservation.

Adopted new §344.62(f) establishes a requirement for irrigation systems to have matched precipitation rates at all emission devices located in the same zone. Matched precipitation rates promote water conservation.

Adopted new §344.62(g) establishes a requirement that irrigation systems not spray water over impervious surfaces such as concrete, asphalt, brick, wood, stones set with mortar, walls, fences, sidewalks, streets, etc. Limiting the spray of water over impervious surfaces conserves water.

Adopted new §344.62(h) requires the master valve be located on the discharge side of the backflow prevention device, if a master valve is used on a newly installed or on an existing system. The location of the master valve could impact the testing of the backflow prevention device. If included, a master valve would conserve and protect the water supply. The adopted section clarifies that the requirement is "when provided" not "if required" since the use of a master valve is at the discretion of the irrigator.

Adopted new §344.62(i) requires the use of colored PVC pipe primer solvent. Colored PVC pipe primer solvent would promote better adhesion when cementing pipe joints together, thus minimizing leaking pipes, which would promote water conservation. The adopted section states that the primer should be applied in accordance with either the Uniform Plumbing Code or the International Plumbing Code.

Adopted new §344.62(j) establishes the requirement that technology, in the form of rain or moisture sensors, or various other methods, be installed on all new automatic irrigation systems. The requirement could be met by other technologies that are designed to detect moisture and shut off the landscape irrigation system. The requirement extends to new systems and those with automatic controllers that are replaced during a repair. The use of this technology promotes water conservation. The adopted section exempts El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, Terrell, Loving, Winkler, Ward, Reeves, Ector, Crane and Pecos counties from the requirement.

Adopted new §344.62(k) establishes a requirement for an isolation valve on new installations. The isolation valve allows the water flowing to the irrigation system to be manually turned off without turning off the water supply at the water meter, thereby allowing water to be used for other purposes in a building. This would promote water conservation.

Adopted new §344.62(l) establishes that all piping must be covered according to the manufacturer's published specifications. If there are no specifications, a minimum coverage of six inches is established by the adopted rule. A two inch minimum coverage is adopted for areas that have utilities or structures that prevent the minimum recommended coverage. The existing rule provided for a variance where utilities, tree roots, or man made structures are encountered. "Structures" in the previous rule has been

changed to "man-made structures" for better understanding. A new requirement will require irrigators to use select fill, to compact all trenches and holes created during the installation of irrigation systems, and return the area to the original grade. The new section replaces existing §344.77(e). Pipes that are not properly covered can be damaged more easily and result in wasted water. The adopted section allows mounding over pipe in certain instances and requires the mounding to be noted on the plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

Adopted new §344.62(m) establishes standards for the use of electrical wiring and wire splices in an irrigation system, including the minimum depth of cover for wiring. The depth of cover for wiring is necessary in order to conform to the National Electrical Code. The code is not a national law, but its observance is mandated in many states and local areas and represents best practices. The new section replaces §344.77(f). The adopted rule requires electrical wiring that is used to connect the automatic controller to any electrical component to be buried at least six inches deep. Use of approved electrical wiring and proper installation is critical to preventing a health hazard. The adopted section states that electrical wire splices which "may be" exposed rather than "are" exposed must be waterproof.

Adopted new §344.62(n) establishes that water within an irrigation system is non-potable. The rule further establishes that no drinking or domestic water outlets, such as hoses used to fill swimming pools or decorative fountains could be connected to an irrigation system. The rule also establishes conditions whereby a hose bib could be attached to the irrigation system. The adopted rule requires the hose bib and any hoses to be labeled, "Nonpotable. Not safe for drinking." The adopted rule helps protect the water supply and public health.

Adopted new §344.62(o) establishes that effective January 1, 2010, an irrigator must be on-site at all times when landscape irrigation activities are being conducted. If the irrigator cannot be on-site, the irrigator is responsible for ensuring a licensed irrigation technician is on-site to supervise the installation of the irrigation system. It is necessary to set out specific requirements for licensed irrigators during irrigation activities to help ensure the safe and efficient service of irrigation systems.

Adopted new §344.63, Completion of Irrigation System Installation, establishes that the irrigator or irrigator technician providing on-site supervision must complete four tasks. The first task requires the irrigator or irrigator technician to conduct a final walk through with the irrigation system's owner or owner's representative to explain the operation of the system. Second, the irrigator or irrigator technician provides a maintenance checklist to the irrigation system's owner or the owner's representative. As part of the checklist, the irrigator provides the manufacturer's manual for the automatic controller, a seasonal watering schedule, a list of parts that require maintenance and a recommended frequency of maintenance and a statement that the system has been installed according to all rules and regulations and has been adjusted for the most efficient application of water. The checklist requires the signature of the irrigator and the irrigation system's owner or owner's representative. Third, the irrigator or irrigator technician must attach a permanent sticker to each automatic controller showing the irrigator's name, license number, company name, telephone number and the dates of the warranty period. Finally, the irrigator or irrigator technician provides a copy of the design plan showing the actual placement of irrigation system components to the irrigation system's owner or owner's representative. The irrigation system owner or owner's representative will be given the original maintenance checklist. It is necessary to set out specific requirements for licensed irrigators during irrigation activities to help ensure the safe and efficient installation of irrigation systems. The adopted section allows the irrigation technician to perform the

maintenance checklist duties and apply the sticker to the controller. The adopted section clarifies that if the irrigation system is manual, the sticker is affixed to the original maintenance checklist. The adopted section also clarifies that if an automatic controller is used that the manual should be provided. The adopted section removes the phrase "designed and" from the statement to be sealed in recognition of "design" and "installation" only business and changes "design plan" to "irrigation plan." The adopted section clarifies that the irrigation system's owner or owner's representative should be provided a copy of the plan showing the actual installation of the irrigation system and the maintenance checklist. The adopted section allows current or real time evapotranspiration data to be used in addition to historical evaporation data.

Adopted new §344.64, Maintenance, Alteration, Repair or Service of Irrigation Systems, establishes that the irrigator or business owner is responsible for all work performed during the maintenance, alteration, repair or service of irrigation systems during the warranty period. The irrigator or business owner is not responsible for the professional negligence of another irrigator who works on the same system. The adopted rule requires all trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system be returned to the original grade. The adopted rule requires the use of colored PVC pipe primer solvent on pipes and fittings used in the maintenance, alteration, repair, or service of irrigation systems. The adopted rule requires the installation of an isolation valve when maintenance, alteration, repair, or service of an irrigation system involves excavation work at the water meter or backflow prevention device. It is necessary to set out specific requirements for irrigators during irrigation activities to help ensure the safe and efficient maintenance, alteration, repair, and service of irrigation systems. The adopted section contains language that pipe primer solvent must be installed according to

either the Uniform Plumbing Code or the International Plumbing Code. The adopted section clarifies that excavation work at a water meter or backflow device will require an isolation valve on an existing system.

Adopted new §344.65, Reclaimed Water, addresses the use of reclaimed water in landscape irrigation under certain conditions. Having information regarding the use of reclaimed water in landscape irrigation promotes water conservation and helps protect the water supply and public health. The adopted section includes the Spanish translation of "Reclaimed Water - Do Not Drink." The adopted section allows the use of reclaimed water in an irrigation system that is connected to the potable water supply. The change is consistent with 30 TAC §290.

Subchapter G, Advertising, Contract, and Warranty

Adopted new §344.70, Advertisement, replaced existing §344.93 and establishes certain requirements for irrigators who choose to advertise in written or electronic media and require that the commission's contact information be prominently displayed at the irrigator's place of irrigation business. It is necessary for all advertisements to include the license number of the irrigator to help ensure that irrigation practices are performed by a person who is qualified to perform them. HB 4/SB 3 directed the commission to adopt rules governing the duties and responsibilities of irrigators. The adopted section clarifies that trailers that advertise irrigation services must display the irrigator's license number.

Adopted new §344.71, Contracts, replaced existing §344.94 and established the information that must be included in estimates, proposals, bids, invoices, and contracts to install landscape irrigation systems. The section requires that documents be written. Certain information must be included in contracts to help ensure compliance with regulations. The adopted new rule requires that the dates that the warranty is

valid be provided in the contract. Additionally, §344.71(c) recognizes that pass-through contracts, as defined in §344.1(36), do not require the contractor to hold a license but must identify the irrigator and the license number of the irrigator who is responsible for performing the work and providing a warranty. Definition of this type of contract is required for effective enforcement of this chapter. The adopted section adds in language that the sign in the place of business is for the purpose of addressing complaints and the provision that it was a violation if anyone other than a licensed irrigator or exempt individual received compensation through a pass-through contract was removed. The adopted section was changed to remove the requirement that unlicensed businesses could not receive compensation for pass-through contracts.

Adopted new §344.72, Warranties, replaced the existing §344.96 and establishes the requirement that irrigators provide a written warranty on all new installations. The adopted rule requires that the irrigation system's owner or owner's representative be provided a written document for repair work that includes a breakdown of parts that are expended on the job and do not have to provide a warranty for the materials and labor. If a warranty is provided, the irrigator shall abide by the terms of the warranty. The new section also requires specific information be contained in the written warranty. These requirements are necessary in order to help preserve the water conserving efficiency of irrigation systems and to protect against system failure that could result in wasted water. The adopted section does not require the irrigator's license number on a warranty document. The adopted section removes the requirement to provide the manufacturer's warranties to irrigation system owners.

Subchapter H, Irrigator Advisory Council

Adopted new §344.80, Irrigator Advisory Council, requirements are essentially the same requirements that are in existing §344.10, with changes to grammar to improve readability. The number of meetings that a council member could miss is three consecutive regularly scheduled meetings or more than half of the regularly scheduled meetings in one year. The previous requirement was that a council member could miss half of the regularly scheduled meetings and be removed from the council by the commission. In response to comments, the adopted section was changed to remove the prohibition that council members may not be an officer, employee, or paid consultant of a trade association in the irrigation industry or be related to a person that is an officer, employee, or consultant of a trade association.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of the Administrative Procedure Act, Texas Government Code, §2001.001 *et. seq.*, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a "major environmental rule" as defined in Texas Government Code, §2001.0225(g)(3). A "major environmental rule" means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The intent of the adopted rules is to address evolving practices and technology in the irrigation industry that relate specifically to water conservation, non-point source water pollution, protection of potable water supplies, responsibilities of licensed landscape irrigators, and enforceability of irrigation rules. These adopted rules also implement HB 4, SB 3, and HB 1656, 80th Legislature, 2007. Although technology and conservation methods have evolved over the years, no substantive changes have been made to these existing rules since 1996. These adopted rules

would ensure that the agency's rules are consistent with statutory standards and that they are more reflective of current technical practices and conservation methods. Protection of human health and the environment may be a by-product of the adopted rules, but is not the specific intent of the rules.

Therefore, the commission concludes that the adopted rules do not constitute a major environmental rule.

Furthermore, the adopted rules do not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 applies only to a major environmental rule which: 1) exceeds a standard set by federal law, unless the rule is specifically required by state law; 2) exceeds an express requirement of state law, unless the rule is specifically required by federal law; 3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopts a rule solely under the general powers of the agency instead of under a specific state law.

The adopted rules do not exceed a federal standard because there are no federal standards regulating the practice of landscape irrigation. The adopted rules do not exceed state law requirements because these rules are required by HB 4, SB 3, and HB 1656. Also, the adopted rules do not exceed a requirement of an agreement because there are no delegation agreements or contracts between the State of Texas and an agency or representative of the federal government to implement a state and federal program regarding landscape irrigation. And finally, these rules are being adopted under specific state laws, in addition to the general powers of the agency.

Therefore, Texas Government Code, §2001.0225 is not applicable to these adopted rules. The commission invited but received no comments on the draft regulatory impact determination.

TAKINGS IMPACT ASSESSMENT

The commission evaluated these adopted rules and performed an analysis of whether these adopted rules constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of the adopted rules is to update the rules to address evolving practices and technology in the irrigation industry, relating specifically to water conservation, non-point source water pollution, protection of potable water supplies, responsibilities of licensed landscape irrigators, and enforceability of irrigation rules. The adopted rules would substantially advance this stated purpose by setting standards for the installation of irrigation systems and by clearly defining the irrigator's, installer's, irrigation technician's, and inspector's responsibilities. The adopted rules implement HB 4, SB 3, and HB 1656, 80th Legislature, 2007.

Promulgation and enforcement of these adopted rules would be neither a statutory nor a constitutional taking of private real property. Specifically, the adopted regulations do not affect a landowner's rights in private real property because the adopted rules would neither burden nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of these regulations. In other words, these rules would not constitute a statutory or constitutional taking because they only update existing rules to comply with current technical standards and conservation methods and implement new legislation that does not affect a landowner's rights in private real property.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the adopted rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor would they affect any

action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6).

Therefore, the adopted rules are not subject to the Texas Coastal Management Program.

PUBLIC COMMENT

The proposal was published in the February 1, 2008 Texas Register (33 Tex Reg 899). The commission held a public hearing on February 26, 2008. The comment period closed on March 3, 2008. The commission received comments from 43 companies and ten trade associations, nine governmental entities, one environmental group and 15 individuals on the rules. Forty-three entities supported the rules, either partially or with changes; 29 entities opposed the rule.

RESPONSE TO COMMENTS

Accord Irrigation Technologies, Accuscapes Landscaping, Bullfrog Irrigation, Chane Irrigation, Creative Scape Design, Green Industry Alliance, Irrigation Services, Lone Star Irrigation, Lower Colorado River Authority, MacAg Technical Services, Nash Irrigation & Landscape, Water Resources Council of North Central Texas Council of Governments representing 26 member communities, Outdoor Concepts, James Stewart Irrigation, RVi, San Antonio Water System, Sierra Club, Software Republic, Turf Pro, Webbers Landscaping/Sprinkler Company, and seven individuals generally supported adoption of the rules.

Christian Irrigation, City of Austin Water Utility, City of San Angelo, Continental Irrigation, City of El Paso, City of San Angelo, Dallas Irrigation Association, Houston Gulf Coast Irrigation Association, Irrigation, Etc., Irrigation Services Unlimited, Lubbock Chamber of Commerce, Moore Sprinkler Company, Inc., Powerspray Landscape & Sprinkler, Texas Turf Irrigation Association, submitting comments from ten local associations, Water Smart Irrigation, Inc., Wilson Irrigation, and three

individuals supported portions of the rules and expressed concern over some of the requirements or recommended some changes.

The Irrigation Association (IA) and Rio Grande Valley Irrigation Association provided comments. Ace Sprinkler, City of Lubbock, and City of McKinney requested clarification of the requirements. Cantrell Landscaping & Irrigation advocated increased enforcement against unlicensed individuals.

A Best Lawn Sprinklers, Aquamax Sprinkler Systems, Austin Lawn and Sprinkler Association, Bastrop Gardens, City of Dallas, Degreed Landscaping, Delta Irrigation, Dew Drip Irrigation, Down to Earth, East Texas Irrigation Association, Express Lawn Sprinklers, Farmer's Nursery, Ground Cover, Key Sprinkler, Kirkland Sprinkler, LMS Inc., Lupton Irrigation, Mac's Landscaping and Irrigation, Prince Irrigation, Smart Outdoor Services, Texas Panhandle Irrigation Association, Utz Environmental Services, and Waterspirit, Inc. and two individuals did not support the rules.

The commission appreciates the comments.

The commission's responses to comments received has been organized by subject area. The subjects are: irrigation systems subject to rule; design of irrigation systems; new installations; drawing of actual installation; design standards, supervision; records; water conservation; maintenance checklist; definitions (not covered in other areas); standards of conduct; local regulations; business owners and irrigators-in-charge; irrigators, installers and irrigation technicians; irrigation inspectors; seal; backflow prevention; cross-connections; design and installation requirements; maintenance, alteration, repair or service of an irrigation system; reclaimed water; advertisement,

contracts, and warranty; Irrigator Advisory Council; no authority; local authority; Administrative Procedure Act; costs; enforcement; and other comments.

Irrigation Systems Subject to Rule

Several comments were received that suggested some rule components should not apply to all irrigation systems. Comments were received that designs should be optional; be required for commercial projects; that a threshold should trigger drawings; and scaled drawing should be required when the flow rate exceeds 35 to 40 gallons per minute. Some commenters supported drawings for all irrigation systems.

The commission responds that the requirement to prepare and have an irrigation plan on-site during the installation of a new irrigation system has not been changed. The commission responds that HB 4/SB 3 required the adoption of rules that address the design, installation, and operation of irrigation systems, water conservation, and the duties and responsibilities of irrigators. The adopted Chapter 344 rules meet those requirements and will raise the bar for the performance of landscape irrigation services in Texas. The rules mirror some of the IA's April 2005 BMP, that states an irrigation designer or consultant should supply an "Irrigation Design Package" to the irrigation system owner or owner's representative. The package would provide the irrigation system owner or owner's representative with documented irrigation site and zone specific information and values used in design calculations. Providing the owner or owner's representative a copy of the plan will facilitate future repairs due to wear or breaks as the system ages or for additions or modifications to the landscape or irrigation system. The actual plan will facilitate repairs by allowing owners to replace components with like equipment so that routine maintenance

will be accomplished in a manner that will maintain the irrigation system's integrity and will conserve water. The commission did not make changes to §344.61(a) as a result of these comments.

Design of Irrigation Systems

Comments were received on the definition of "design" (§344.1(8)) and the design requirements (§344.61). Some commenters did not think a design should be required. Several commenters supported the design requirements. Several commenters requested clarification of specific requirements.

The commission responds that a design has always been required (See §344.95, Design). The commission was required by HB 4/SB 3 to adopt rules governing the design, installation and operation of irrigation systems. The requirement to produce and provide the irrigation plan to the irrigation system owner or owner's representative is responsive to the legislative mandate to develop rules that address the design of an irrigation system and to address water conservation. A good irrigation design will conserve water by determining the most efficient way to maintain healthy plant life based on factors such as the amount of sun the area receives, the type of soil, wind direction and speed, and any slope in the area being irrigated. Each irrigation system will have a unique combination of features that must be considered to develop a good irrigation system design. Even a large subdivision with hundreds of almost identical homes will have different irrigation requirements - some lots will be corner lots, some yards will have full sun, others will have no sun and the water pressure will be different, thus a design is needed.

The Irrigation Association's (IA) April 2005 Turf and Landscape Irrigation Best Management Practices document (BMP), Appendix B - Irrigation Design Package, states that an irrigation

designer or consultant should supply an "Irrigation Design Package" to the irrigation system owner or owner's representative. The purpose of the package is to provide the irrigation system owner or owner's representative with documented irrigation site and zone specific information and values used in design calculations. The IA's Consumer Handbook (Handbook) states that a consumer should expect a scaled drawing as part of any proposal for a landscape irrigation system.

The basic landscape irrigation training course required for licensing in Texas teaches the need to measure the water pressure, calculate the hydraulic losses in the system, and review the watering needs of the landscape prior to installing an addition to the system. The exam that an irrigator must pass to become licensed requires design knowledge. Each irrigator must take continuing education courses to maintain a license; those courses teach design.

The as-built plan would help the homeowner when making future repairs due to wear or breaks as the system ages or for additions or modifications to the irrigation system.

The type of plan to be provided to irrigation system owner is not being mandated. Irrigators may use a computer assisted design program, a blueprint or sketch. It is important that the entries on the drawing are clear and legibly marked. The commission did not make any changes to the rule as a result of these comments.

IA commented that an analysis of system distribution uniformity and overall site water consumption in relation to evapotranspiration data and site specifics could be used to determine water use efficiency rather than a drawing for every irrigation site.

The commission responds that the information suggested by IA is only a part of the factors that should be considered in evaluating an efficient irrigation system. Distribution Uniformity (DU) is a measurement of the distribution of water over a given irrigated area. A perfect DU is 100%. A DU reading of 65% to 75% is considered good. Evapotranspiration is the combination of evaporation and transpiration from plant material. A design will address the types of sensors, controllers, valves and emission devices that will be used, which lead to a more efficient irrigation system. The irrigation plan will indicate the most efficient design considering all site specific information. The commission did not make any changes to the rules based on these comments.

Some commenters suggested removing the requirement to provide the irrigation system owner with the plan showing the actual installation of the irrigation system and some commenters provided alternative recommendations. Some commenters supported a design requirement.

The commission responds that HB 4/SB 3 required the adoption of rules that address the design, installation, and operation of irrigation systems, water conservation, and the duties and responsibilities of irrigators. The adopted Chapter 344 rules meet those requirements and will raise the bar for the performance of landscape irrigation services in Texas. The rules mirror some of the IA's April 2005 BMP, that states an irrigation designer or consultant should supply an "Irrigation Design Package" to the irrigation system owner or owner's representative. The package would provide the irrigation system owner or owner's representative with documented irrigation site and zone specific information and values used in design calculations. Providing the owner or owner's representative a copy of the plan will facilitate future repairs due to wear or breaks as the system

ages or for additions or modifications to the landscape or irrigation system. The actual plan will facilitate repairs by allowing owners to replace components with like equipment so that routine maintenance will be accomplished in a manner that will maintain the irrigation system's integrity and will conserve water. The commission did not make any changes to the rules as a result of these comments.

Some commenters stated that homeowners do not have the expertise or knowledge to review the plans, cities do not have the manpower to review the plans and that municipalities should make the decision to require a plan.

The commission responds that HB 4/SB 3 required the commission to adopt rules that address the design and installation of irrigation systems to conserve water. While most consumers probably would not be able to perform pressure system loss calculations or a design pressure calculation, the consumer generally knows where they want the irrigation system installed and what they want to water. The adopted rules do not require municipalities to review the plans. Municipalities with a population of 20,000 or more and water districts that choose to implement a landscape irrigation program are authorized to collect a permitting fee to cover the cost of the program. Local governmental entities may decide the requirements for their permitting program. Drawing a design and performing the supporting calculations were a critical part of the basic irrigation training course and exam. Irrigators must take continuing education courses to maintain their license, numerous courses have been and will be available that address design. An irrigator may contract the design, or any portion of the design, to another irrigator. The commission did not make any changes to the rules in response to these comments.

There were several comments about the "design" and "irrigation plan" definitions, alternative definitions were provided, clarity requested, and new definitions requested.

The commission responds that the irrigation plan describes the scaled drawing, the scope of the project and the document that represents the changes made in the installation of an irrigation system (an as-built plan or record drawing). The "design" includes all of the elements that are involved in developing the scaled drawing and may include items such as scheduling work. The term "design" was defined in §344.1(8) as the "act" of determining various elements in a landscape irrigation system that would result in an "irrigation plan." "Irrigation plan" was defined in §344.1(19) as "a scaled drawing" that would list "required information, the scope of the project, and represent changes made in the installation". The uses of the terms are consistent in Chapter 344. Information that is necessary to create site specific designs is taught in basic landscape irrigation courses and in continuing education courses that are required to maintain a landscape irrigator license in Texas. The term "scope of work" refers to the boundaries of what the project will accomplish and could include a timeline for accomplishing the project. The irrigator may determine what should be included in the scope of work. The commission agrees that emission devices should be used in the definition (§344.1(8)) of design to be consistent with the remainder of Chapter 344 and §344.43 (e) and (f) was changed to change the word "design" to "plan" to add clarity to the requirement.

New Installations

Numerous comments were received stating that the definition of new installation should not include adding irrigation zones because the current definition would trigger additional requirements and add cost to consumers. Alternative language was suggested that would add new definitions of "modified system and replacement system," "temporary system," and "extension or expansion of an irrigation system."

The commission responds that the definition of new installations has been changed to remove the phrase "or a system where one or more new zone valves are added to an existing system." Since the definition of "new installation" has changed, the permitting requirements would not be triggered by the state's rules. Local areas may have requirements that would require a new permit. The suggested definitions are not needed since the rule changed. Changes were made to §344.1(33) of the rules based on these comments.

Drawing of Actual Installation

Commenters supported and commenters disagreed with the requirement to make changes to the drawing used during construction to show the actual installation of the irrigation system. Several commenters requested clarity in how the requirement could be met and in the terms used in the rule.

The commission responds that the plan can be changed electronically or marked in pen or pencil to replicate the actual installation deviations from the plan. The irrigator or irrigation technician can make the changes as part of the on-site supervision. The plan may be kept electronically or in a binder or protective sleeve to prevent damage from the elements. The irrigation plan should be signed and sealed by the installing irrigator and may be stamped "as built" or "record drawing." A copy of the irrigation plan is provided to the irrigation system owner or operator as part of the final

walk through. Since the plan is ultimately provided to the irrigation system owner as part of the final walk through, the signature and stamp are not required. The commission has amended §344.61(a) to allow the use of an electronic plan on-site and has clarified the requirement to provide the irrigation system owner a copy of the final plan in §344.63(4) as a result of these comments.

Several comments were received stating that scaled drawings were not needed, other commenters stated that scaled drawings were needed, other commenters stated that scaled drawings were needed for commercial installations only. Some commenters provided alternative scales. An alternative proposal to use global positioning system (GPS) locations was received. Other commenters requested clarity in how the drawings could be used. One commenter stated that "design pressure" and "scale size" should be included.

The commission responds that HB 4/SB 3 require the commission to adopt and enforce rules related to the design, installation, and operation of an irrigation system and address water conservation. The irrigation plan should include a scaled drawing. A scaled drawing with the minimum essential information as delineated in §344.61 is important for ensuring the installation of the irrigation system is done to the design standards established by the licensed irrigator so that the system performs efficiently and does not waste water. The scaled drawing can be used by other licensed irrigators or the irrigation system owner to make repairs, replace the irrigation system components, or modify the system due to maturing landscape or additions to the irrigation system. The scaled drawings will provide for an objective inspection by landscape irrigation inspectors for purposes of confirming compliance with state and local requirements or water auditors in auditing the system. Use of GPS coordinates for scaled drawings is not practical because the accuracy

depends on the quality of the device being used which would require the commission to establish standards the GPS device would have to meet. Use of GPS locations would also be impractical for small sized systems, such as residential, installed to irrigate small areas with multiple zones. The suggestion on the use of flow to represent the irrigation plan can miss some of the critical design and system elements.

The plans, details, and designer intent must be clearly legible. The scale must be set to a standard scale that is indicated on the irrigation plan. The design pressure must also be indicated on the irrigation plan. Changes were made to §344.61(c)(8) and (9) to add the scale and design pressure to the list of items required in the irrigation plan. Changes were made to the rules as a result of these comments.

Several commenters stated that the actual drawing showing the installed irrigation system should be called "as built," "as-built drawings" or "record drawings" and suggested definitions for those terms.

The commission responds that several different terms are used by the industry. The actual drawing showing the installed irrigation system does not endorse any specific term. The commission did not make any changes to the rules as a result of these comments.

Design Standards

Comments were received that information required in the design standards, such as precipitation rates, watering requirements, etc., could not be provided by irrigators and end users could not use the information unless a special controller was used, so the requirement should be removed.

The commission responds that precipitation rates, plant watering needs, and distribution uniformity are taught in basic irrigation courses and are part of the examination to obtain an irrigator's license in Texas. Continuing education courses used by licensees for obtaining continuing education units for renewing licenses also incorporate these requirements in the training. The information is needed to properly set automatic controllers to deliver a sufficient amount of water to maintain healthy plants without over watering and wasting water. The information can be used by irrigation system owners or their representatives to reprogram automatic controllers. Since some controllers must be reprogrammed after a power outage, the information could be useful to irrigation system owners or operators. The commission did not make any changes to the rules as a result of this comment.

An individual stated that §344.61(c)(6)(A) assumes that all irrigation systems are automatic and suggested rewriting the phrase as "If irrigation system is automatic, then identify and locate controller."

The commission responds that a change to §344.61(c)(6)(A) has been made to reflect "controller" to address both manual and automatic controllers. Changes were made as a result of this comment.

An individual stated that the word "include" in §344.61(b) should be replaced with "identify the total" and replace "complete coverage" with "total coverage" to better identify that an irrigation plan might not cover all areas.

The commission responds that the word "include" has been used in the rules for several years and has a common meaning to irrigators in Texas. The commission did not make any changes to the rules as a result of this comment.

One commenter stated that the irrigation plan referenced in §344.61 should include quantitative information about annual water usage and provided recommended language.

The commission responds that while this is a viable objective, it is beyond the minimum standards these rules are intended to establish. The requirement to include quantitative information may be considered on a local basis or level. The commission did not make any changes to the rules as the result of this comment.

Commenters stated that the requirement that the installed backflow prevention method must be indicated or documented on the site irrigation plan should be removed.

The commission responds that the requirement that the installed backflow prevention method must be included because the owner can verify that the device selected is accepted by the local water purveyor. The backflow device is the single most important device to prevent contamination of the water supply. If the irrigation system owner later decides to inject fertilizer, pesticide or to install a treated component to prevent root growth in the irrigation system, information will be available to determine if a different type of backflow prevention device should be used. The commission did not make any changes to the rules as a result of these comments.

Supervision

Several commenters supported the requirement for on-site supervision. Some commenters stated that the definition of "supervision" should be changed and that a definition for "direct supervision" added. One commenter noted that corresponding changes would be needed in other areas.

The commission responds that there has been a requirement for many years for an irrigator to provide "direct supervision" to a person who assists in the installation, maintenance, alteration, repair, or service of an irrigation system (See Texas Occupations Code, §1903.002(c)(9)). The commission was directed by HB 4/SB 3 to adopt rules related to the duties and responsibilities of landscape irrigators. Beginning January 1, 2010, either the irrigator or the irrigation technician (working under the direction of a licensed irrigator) must be on-site at all times during the installation of an irrigation system. The definition of supervision includes on the job oversight and direction as well as defining direction by an irrigator over an installer and irrigation technician. The commission did not make any changes to the rules as a result of these comments.

Some commenters stated that the "irrigation technician" phrase, license requirements, duties and responsibilities, design and installation requirements should be removed from various sections of the rules. Some commenters stated that the phrase related to the irrigation technician working under the direction of a licensed irrigator beginning January 1, 2010 should be deleted.

The commission responds that the irrigation technician allows the irrigator to spend more time designing, consulting, selling and performing other duties while still providing on-site supervision during the installation of an irrigation system. The licensed irrigation technician will have

knowledge about installation of irrigation systems, be able to read and mark-up irrigation plans, inform the irrigation system owner or operator about how the irrigation system works and how to maintain the irrigation system. These are critical tasks in conserving water. The phase-in will allow time for irrigation technicians to become trained and licensed. The commission did not make any changes to the rules as a result of these comments.

Several commenters supported having a licensed person on-site at all times during the installation of an irrigation system. Other commenters did not support having a licensed person on-site during an irrigation system installation. Some commenters disagreed with the cost or timing of the requirement or requested clarity in the requirements. A commenter suggested the requirement apply only during critical steps such as backflow device installation, pipe fitting, valve setting, wiring, and other critical junctures. Another commenter suggested wording similar to the wording used by the Texas Department of Agriculture's pest control operations and certified applicators. Another commenter stated that with numerous electronic devices available, irrigators should be readily available. One commenter stated that if a technician passed a test, he should be allowed to perform work without supervision. Another commenter stated that supervision standards should be relaxed on residential installation. Some commenters stated that the rules were grossly unfair to small and micro businesses. Some commenters suggested an alternative approach of using an apprentice that would be on the job for two years, completed courses, and passed a test to become a technician.

The commission responds that the job site supervision language is critical in the installation of an irrigation system designed to conserve water. The commission was directed by HB 4/ SB 3 to adopt rules that address the duties and responsibilities of irrigators, the installation of irrigation systems,

and water conservation. A trained, licensed individual can make responsible decisions regarding the installation of the irrigation system, because even the best design for an irrigation system can be installed in such a way that water would be wasted.

As part of the completion of the irrigation system, the irrigator must sign a statement that the irrigation system was installed in compliance with all state rules and local regulations and provide the irrigation system owner with a copy of the plan showing the actual installation of the irrigation system. The irrigator signing the required statement must have knowledge that the irrigation system will operate correctly to conserve as much water as possible. Having on-site supervision with a trained irrigation technician while the irrigator is away from the site, better assures him the system was installed in compliance with state rules and local regulations.

A phase-in of the requirement to have an irrigator or irrigation technician on-site beginning January 1, 2010 will give the regulated community eighteen months to prepare for the new requirement. The phase-in time should allow sufficient time to recruit, train, test and license irrigators and irrigation technicians to meet the demand for on-site supervision.

The pest applicators license administered by the Texas Department of Agriculture requires successful completion of a test, insurance (\$100,000 for property damage and \$100,000 for bodily damage), a \$180 non-refundable fee, a Nursery License, that the applicant cannot have been convicted of a felony in the last five years, and the employer must submit an application. The commission proposal for an irrigation technician is less expensive and will require less paperwork.

Although electronic devices are available, irrigators or irrigation technicians must be able to evaluate site conditions and determine the impact of changes to the irrigation system that might impact the system's efficiency. An unskilled labor force would not be knowledgeable about how a change (for example using a different size pipe) could impact the performance of the irrigation system. The irrigation technician will not be required to be trained or tested on irrigation system design. Since the technician will not have this knowledge, the irrigator must supervise the irrigation activity.

An irrigator accomplishes work at the site through the people that are hired to perform the actual installation. It is important that irrigators supervise their staff to ensure irrigation systems are installed according to state law and the design and that any deviations from that design will not impact the integrity of the system. The irrigator is ultimately responsible for the irrigation system, so the irrigator must be responsible for the staff that installs the system.

The commenter did not provide any detailed comments or specific information to support the claims that the costs to small and micro-businesses in the fiscal note are incorrect.

The requirement for direct supervision of a person who assists in the installation, maintenance, alteration, repair, or service of an irrigation system has been in Texas Occupations Code, §1903.002(c)(9) for several years. The irrigation technician should assist the small business owner in on-site supervision that would otherwise require a licensed irrigator. The adopted rules will provide greater flexibility for small and micro businesses to comply with the legislative mandate. Since most

irrigation businesses are small/micro businesses, they are not at a competitive disadvantage since all irrigation businesses are required to comply with the adopted rules.

The adopted rules require the irrigation technician to complete a training class and pass the examination and then supervise or perform irrigation activities under the direction of a licensed irrigator.

The requirement in §344.30(c) for an irrigation technician to connect an irrigation system to a water supply has been changed. An irrigation technician will be allowed to connect an irrigation system to a water supply without the supervision of an irrigator. This change will make the installer and irrigation technician's duties compatible. Changes were made to the rule as a result of these comments.

A commenter stated that the direct supervision and design requirements cannot be complied with because of a disability. A commenter requested clarity in the on-site requirement.

The commission responds that the enabling legislation for licensing landscape irrigators exempts from the licensing requirement "a person who assists in the installation, maintenance, alteration, repair, or service of an irrigation system under the direct supervision of an individual described by Subchapter F of this chapter who is licensed under Chapter 37, Water Code". The licensed irrigator has been responsible for the "direct supervision" of staff for several years. In fact, allowing a licensed irrigation technician to perform on-site supervision should allow compliance with the legislative mandate more easily since the irrigator does not need to be at the job site at all

times but should be available to resolve any problems. As a supervisor, spot checks of work being performed are always appropriate. The requirement for a design has been a critical element in the classroom instruction and examination for licensed irrigators for many years. The design requirements are contained in §344.95 of the existing rules. Numerous continuing education courses cover the principles of irrigation design and continuing education is a requirement for maintaining landscape irrigation license. The change that these adopted rules requires is that the design be memorialized in paper or electronic form. Requiring a paper or electronic drawing of the irrigation system on the job site will allow the irrigation technician to carry out on-site supervision of crews that install the irrigation system. Correctly installing the designed irrigation system will conserve water. HB 4/SB 3 directed the commission to adopt rules that address the design and installation of irrigation systems and the duties and responsibilities of licensed irrigators. HB 4/SB 3 did not provide an exemption for irrigators that might not be able to accomplish the essential duties of design and installation of irrigation systems. However, the TCEQ complies with the Americans With Disabilities Act and does not discriminate on the basis of disability in the administration of its licensing and certification programs. The commission did not make any changes to the rules as a result of this comment.

Records

A commenter stated that the definition of "record of landscape irrigation activities" should not include design notes and irrigation plans. Some commenters stated the records requirements were onerous and burdensome. A commenter stated that there were too many records to retain.

The commission responds that requirement to maintain design notes and advertisements was removed. The irrigation plan is the scaled drawing which illustrates the selected placement of various components that comprise the irrigation system and is important in the repair, maintenance or alteration and maintaining a record of the irrigation system is sufficient. The commission did make changes to §344.1(40) based on this comment.

Some commenters stated that: an irrigator should not be responsible for maintaining records as required in §344.35(d)(5); irrigation system owners should provide information; the commission or any other agency should not be provided any paperwork; that irrigators should determine what records should be retained; or only the permit, warranty and contract should be maintained. IA stated that keeping copies of all records is not practical and that establishing recordkeeping requirements of contractual obligations from a business entity to a consumer was a more practical option.

The commission responds that HB 4/SB 3 directed the commission to adopt rules related to the duties and responsibilities of landscape irrigators. The records that are required in §344.38 do not include the design notes and copies of advertisements. If some parts of the specifications are used consistently, only one copy of the specifications need to be maintained (for example items that refer to the manufacturer's published recommendations). The remaining information is needed in the investigation of complaints. The commission did make changes to §344.38 as a result of these comments to remove the requirement to maintain the design notes and copies of advertisements.

A commenter stated that the agency was concerned about the environment but was creating more paper. Commenters requested clarification of §344.38, asking what was intended in making records available.

Commenters supported maintaining records for one year and two years. Commenters supported making records available in: 30, 14, 10, 7 and 5 days. IA commented that two days was not sufficient for small or micro businesses to make records available. A commenter stated that failure to have a plan on-site might need to have a shorter time frame to correct.

The commission responds that a change in §344.38 was made to allow ten business days to provide records to a requesting governmental entity. The records are essential in the conduct of inspections or investigations by irrigation inspectors to ensure the irrigation system in question is compliant with and that the irrigator complied with state laws and local regulations. Irrigators may choose to keep records electronically and make those available to the irrigation system owner or governmental entity or produce hard copies of documents if requested. If an irrigator chooses to keep electronic records, there would not necessarily be more paper used. The rules require the irrigation plan to be on-site during the installation. HB 4/SB 3 require the commission to adopt and enforce landscape irrigation rules related to the design, installation, and operation of irrigation systems, water conservation, and the duties and responsibilities of irrigators. Changes to §344.38 were made as a result of these comments.

Several commenters stated that if an inspector passed an irrigation system there was no reason for the irrigator to keep any records related to the irrigation system. Some commenters did not support requirements for installers and irrigation technicians to maintain records and to make those records available. Some commenters supported the requirement.

The commission responds that HB 4/SB 3 require the commission to adopt and enforce rules related to the design, installation, and operation of irrigation systems, water conservation, and the roles and responsibilities the rule will facilitate the review of complaints to determine compliance with the Chapter 344 rules or local ordinances or rules. It is important to obtain copies of the documents used in the sale, design, installation, maintenance, alteration, repair or service of an irrigation system in order to perform a full investigation of the complaint. An inspector is not required to review or maintain copies of contracts, warranties, or invoices. The commission did not make any changes to the rules as a result of these comments.

An individual asked if plumbers, electricians, landscape architects, or engineers have to keep sealed documents for three years. A commenter stated that no other industry in Texas had to keep these kinds of records.

The commission responds that irrigation system owner places his or her trust in an irrigator to design and install an irrigation system that conserves water. The commission does require maintaining records in other programs. The requirements are related to the duties and responsibilities to conserve a natural resource, water, as outlined in HB 4/SB 3. An irrigation system should work for three years so it is important to maintain records for that period of time. Many parts purchased by professional irrigators have a three-year warranty provided the manufacturer, maintaining records will help irrigation system owners obtain defective parts at no or a reduced cost. The commission did not make any changes to the rules as a result of these comments.

IA commented that regulatory authorities might abuse the requirement to produce records.

The commission responds that the intent of the rule is to facilitate the conduct investigations.

Regulatory authorities are held to high ethical standards. Almost every regulatory authority has a complaint and/or whistleblower process that can be used to report suspected abuse. The rule is not intended to allow regulatory authorities to abuse their power in the absence of a complaint. The commission did not make any changes to the rule as a result of this comment.

Water Conservation

Some commenters stated that irrigators should not be responsible for conserving water and that the requirement should be removed and one commenter stated the requirement was too extreme.

The commission responds that HB 4/SB 3 specifically requires the commission to adopt and enforce standards governing water conservation for irrigation system design, installation, and operation. Since landscape irrigation systems use water and irrigators design and install irrigation systems, it is appropriate that water conservation be a responsibility of landscape irrigators. The commission did not make any changes to the rule as a result of these comments.

Several commenters stated that the definition of "water conservation" should be changed and provided alternative language. Several commenters noted that the definition of "water conservation" contained an incorrect reference.

The commission responds that the definition of water conservation was developed to be specific to the Chapter 344 rules so the reference to an irrigation system remains. The definition is needed to add clarity to §344.60, Water Conservation. A mature landscape will not need the water application that a newly installed landscape will need. The commission changed §344.60 to provide the correct reference to the definition of water conservation.

Maintenance Checklist

Some commenters suggested changes to the maintenance checklist definition to only include controller manual, basic scheduling including precipitation rates by station, with a recommended number of minutes to apply one quarter inch of water per day, the type of plant material being watered, the type of water distribution device being used, the instruction of the operation of the controller and testing the system, and the location of the emergency water shutoff for the irrigation system.

The commission responds that HB 4/SB 3 directed the commission to adopt rules related to the operation of irrigation systems and water conservation. The suggestion to limit the maintenance definition will omit critical items regarding the operation of the system. The adopted definition of maintenance checklist contains information that will help the irrigation system owner maintain and operate the irrigation system in a manner that will promote water conservation. The commission did not make any changes to the rules as a result of these comments.

Several commenters stated that all references to conducting a final walk through of the irrigation system with the owner or owner's representative, completing the Maintenance checklist, placing a sticker on the controller, providing a copy of the design plan to the owner, and that the sticker should be removed. Some commenters recommended changes to the walk through. Other commenters supported the final walk

through. One commenter recommended that real time evapotranspiration (ET) data be incorporated into the maintenance checklist.

The commission responds that HB 4/SB 3 directed the commission to adopt rules that address the installation, operation, and water conservation of irrigation systems. The irrigation system's owner or owner's representative must know how to operate and maintain the system to conserve water. The IA's Handbook states that a consumer should expect a full walk through of the irrigation system that will include full instructions on how to care for the system and how to use the mechanical components of the system such as controllers and timers. The items on the maintenance checklist are intended to provide the owner with the necessary information in order to operate the irrigation system in an efficient manner and help conserve water. The sticker on the controller contains contact information for the irrigator and the dates the warranty is valid. The final drawing showing the actual installation of the irrigation system will result in the ability to perform repairs more quickly and will allow the homeowners or irrigator to replace parts with identical parts resulting in water conservation. The drawing facilitates the assessment and changes as the landscape matures and plant watering needs change. Seasonal watering schedules, which irrigators are taught how to calculate in basic irrigation courses and in the continuing education courses, will assist the homeowner in operating an efficient irrigation system. If the owner of the system is aware of the assumptions that were made in designing the system, the owner may be better prepared to reprogram the controller to conserve water and maintain healthy plant material when those assumptions change. The definition of "maintenance checklist" states that the watering schedule is "suggested". The definition of "maintenance checklist" includes "any water conservation measures currently in effect from the water purveyor and the name of the water purveyor". The allowance

for real time ET data has been added to the rule in §344.63(2)(B). The commission made changes to the rules as a result of these comments.

IA and other commenters stated that the walk through and checklist requirements were not practical since many irrigation systems were installed at new homes prior to sale to an owner and some projects assign the responsibility for operating the system to the irrigator. Other commenters stated that the checklist requirement eliminates the opportunity for companies to differentiate themselves by offering excellent customer service.

The commission responds that the requirements are more than an opportunity for customer service relationships - they are a cornerstone in making irrigation system owners more aware of the water that is being used in the irrigation system and to provide information on how to reduce the amount of water being used. The sticker on the controller should help the new owner locate the installing irrigator. The package of information (manual, watering schedules, maintenance components, etc.) should be provided to the builder. The builder should, in turn, provide this information to the home owner just as operating information on the dishwasher or stove is provided. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that the wording in §344.62(o) relating to the on-site requirement should be changed to add "final walk through" to the paragraph.

The commission responds that §344.62 refers to the minimum design and installation requirements for an irrigation system. The "walk through" is a part of §344.63 and includes those requirements

which are necessary to complete the installation of the irrigation system installation. The commission did not make any changes to the rules as a result of this comment.

Commenters stated that a person or irrigation technician under the supervision of the irrigator-in-charge or an irrigator could complete the checklist and complete the final walk through. A commenter asked if providing a CD to an irrigation system owner covering maintenance of the irrigation system was acceptable.

The commission responds that the rules have been changed to allow an irrigation technician to perform the maintenance checklist items including the final walk through. Providing a CD to a customer that includes information on maintaining the irrigation system is a good tool and could assist the irrigation system owner perform routine maintenance. Changes were made to §344.63 as a result of these comments.

An individual commented that §344.63(2) should be clarified so that it is understood that irrigators should provide a copy of the maintenance checklist to the homeowner.

The commission responds that §344.63(2) has been changed to clarify the maintenance checklist must be provided to the owner, or the owner's representative. Changes were made as a result of this comment.

A commenter stated that the maintenance checklist requirement was cumbersome and caused extra liability to the irrigator.

The commission responds that the checklist will be created with minimal effort and the commission plans to provide a model template. The checklist can be repeated on every job. The information provided on the maintenance checklist will provide owners and operators with information to operate the irrigation system more efficiently, thus conserving water. The rule has been changed in §344.36(d)(2) to allow the irrigation technician to perform the final walk through which should make the process less cumbersome. Changes were made to the rule as a result of this comment.

An individual objected to sealing the maintenance checklist.

The commission responds that sealing the maintenance checklist constitutes the irrigator's acceptance of professional responsibility that the items on the checklist have been completed and provided to the irrigation system's owner or owner's representative. HB 4/SB 3 directed the commission to adopt rules related to an irrigator's duties and responsibilities. The commission did not make any changes to the rule as a result of this comment.

A commenter suggested that the checklist contain more sophisticated watering schedules.

The commission responds that the proposal has merit and the programming described may be performed by some irrigators as part of the initial controller programming. Local governmental entities may require the scheduling as a method to meet water conservation goals. The commission did not make any changes to the rule as a result of this comment.

A commenter stated that the end user can refuse to sign the maintenance checklist with no consequence and that the irrigation system should be red-tagged until the owner signs the maintenance checklist. A commenter stated that refusal to sign the maintenance checklist sounded confrontational.

The commission responds that the provision was included to allow an irrigator to notate the checklist that the irrigation system owner or owner's representative was unable or unwilling to sign the checklist was intended to prevent confrontation. Every irrigation system owner should want to protect the investment in an irrigation system and have the lowest water bills possible, but there may be occasions when it is impossible to get a signature on the checklist. The rule addresses those occasions. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that not all irrigation systems are automatic and provided alternative language for §344.63(2)(A) and (3). An individual stated that sticker provisions should be made for manual irrigation systems in §344.63.

The commission responds that the suggested change to §344.63(2)(A) states that if the system has an automatic controller, the manufacturer's manual should be provided. To clarify §344.63(3), a change was also made to the rule to clarify placement of the sticker on the automatic controller, and placement of the sticker for a manual controller. The commission changed the rule as a result of the comment.

A commenter stated that §344.63(2)(B), seasonal watering schedule, monthly effective rainfall, plant landscape coefficient factors and site factors should be provided only to irrigation systems installed with

an ET or smart controller and provided alternative language. An individual stated that an irrigator would need to understand irrigation auditing to correctly set the watering schedule in the controller.

The commission responds that this information would benefit all irrigation systems and can be used to calculate a watering schedule by hand or by computer. This information is needed so irrigation system owner's can change the watering schedule once plants are established and as seasons change. An irrigator is taught water scheduling in basic training courses that are required to become a licensed irrigator and in subsequent continuing education courses that are required to maintain landscape irrigation licenses. The commission did not make any changes to the rules as a result of this comment.

An individual commented that §344.63 should be changed to ensure that the responsibilities of the irrigator that designs the system and the irrigator that installs the system are clearly defined. An individual commented that he should not be responsible for ascertaining whether changes to designs were made by an installing irrigator and that the irrigator should not be required to collect and maintain as-built for jobs performed by other irrigators.

The commission responds that the language in §344.63(2)(D) has been changed to reflect that the installing irrigator is only responsible for the installation of the irrigation system. Changes to the language on the maintenance checklist should relieve the irrigator designing the irrigation system of any responsibility for as-built plans. Changes were made to the rules as a response to these comments.

Definitions

Some of the comments related to definitions have been addressed in the subject area.

Design pressure. One commenter stated that the sentence "Design pressure is also the manufacturer's published minimum operating pressure" was incorrect.

The commission responds that the definition has been revised to address the comment. Changes were made to §344.1(9) as a result of this comment.

Installer. A comment was made that the word "installer" should be removed from the rules and the only reference should be when the installer license will cease to exist.

The commission responds that the installer will have duties and responsibilities through December 31, 2009. The adopted rules become effective on January 1, 2009. The information is needed during the interim. The commission did not make any changes to the rules as a result of this comment.

Irrigation system. A commenter stated that the definition of "irrigation system" should have the words "and conservation" removed because it might imply that an irrigation system would conserve more water than using other methods to irrigate an area and generally, that is not the case.

The commission responds that although irrigations systems may have different applications, HB 4/SB 3 directed the commission to adopt rules governing landscape irrigation systems that improve water conservation. The purpose of the rules is to improve water conservation in irrigation systems,

so the term "and conservation" was not removed from the definition of irrigation system. The commission did not make any changes to the rules as a result of these comments.

Landscape irrigation. A commenter stated that the definition of "landscape irrigation" should be changed to include the phrase "the necessary amount of water to sustain the healthy growth".

The commission concurs with the comment and has changed §344.1(26) to respond to this comment.

Pass-through contract. An individual requested additional clarity and definition of the term.

The commission responds that a pass-through contract is one in which the irrigator or exempt business owner is not a party of the original contract. An example of a pass-through contract would be an owner who contracts with a general contractor to build a shopping center. The general contractor then sub-contracts work to an exempt business owner to install an irrigation system and landscaping. The commission did not make any changes to the rules based on this comment.

Zone Flow. A commenter stated that the definition of zone valve needed to include "gallons per hour" for low volume systems. Some commenters stated that the definition of zone flow would take four minutes (with an average 16-station test requiring 64 minutes) and would cost the customer \$60 to \$120 and would waste water. Another commenter stated that the only precise way to determine zone flow is to install a flow meter device or watch the water meter and estimate the zone flow which was only used in

water management software. A commenter stated that zone flow would change after more homes are added to the supply line.

The commission responds that the definition has been changed to reflect gallons per hour as an alternative measure for low volume systems and to allow a reading from a flow meter or to let the water meter stabilize after turning on a valve and take a valid reading at that time. The commission made changes to §344.1(45) based on these comments.

Commenters stated that new definitions were needed for "evapotranspiration", "precipitation rate", "dynamic pressure", "pressure regulation", "public water supply", "private potable water supply", and "irrigation efficiency". An individual commented that definition of items called out or detailed was needed but did not provide any additional specificity.

The commission responds that these terms are common terms in the irrigation industry and are taught in basic irrigation training courses and in continuing education courses needed to maintain irrigation licenses in Texas. Additional detail has been added as the result of other comments. The preamble to the rules also provides more detail. Commission landscape irrigation staff or local irrigation programs may be contacted for more specific information. The commission did not make any changes to the rule as a result of the comments.

Standards of Conduct

A commenter stated that the sentence "The legislature has vested the commission with the authority and duty to establish and enforce standards of professional conduct and ethics for practitioners in the

irrigation industry." should be deleted. A commenter stated that the requirements of §344.21 are to be used against irrigators and hold irrigators liable for too much.

The commission responds that in the current rules, Chapter 344, Subchapter F contained standards of conduct for licensed irrigators and installers and that the subchapter stated "the legislature has vested the commission the authority and duty to establish and enforce standards of professional conduct and ethics for practitioners of the irrigation industry". The intent of the standards of conduct was to prescribe responsibility and knowledge on the part of the irrigator and installer and to aid in governing the irrigation industry. It is the belief of the commission that the 81st Legislature by passing HB 4, SB 3, and HB 1656 did not provide direction to the commission to change that responsibility. The commission has not made changes based on the comment.

Local Regulations

Numerous commenters stated that exempting irrigation systems that are connected to a groundwater well used by the property owner for domestic use could eventually lead to contamination of a larger water source such as an aquifer. Commenters questioned why the exemption was provided and wanted to know the difference in the contamination of the water supply from the water source. Some commenters stated that an irrigation system connected to a groundwater well should be inspected and have the proper backflow device.

The commission responds that HB 1656 allows irrigation systems that are connected to a groundwater well used by a property owner for domestic use to be exempted from local regulation

including permitting, inspection, and enforcement. The commission did not make any changes to the rules based on the comments.

Commenters requested clarification of the inspection requirements, some commenters stated that HB 4, SB 3, and HB 1656 do not require inspections and that water on the discharge side of the backflow device was not required to be inspected by any governmental entity. One commenter supported the inspection requirements as a way to improve irrigation system installations.

The commission responds that HB 1656 requires municipalities with a population of 20,000 or more and allows water districts to adopt and enforce a landscape irrigation program that is at least as stringent as these adopted rules. Other political subdivisions of the state are not prohibited from adopting ordinances or regulations related to landscape irrigation to protect the public water supply. HB 4/SB 3 directed the commission to adopt rules governing irrigation systems and duties and responsibilities of irrigation licensees. The adopted rules establish inspection requirements for inspectors that may be employed or contracted with by the municipalities or water districts. Municipalities and water districts may establish additional inspection requirement for irrigation systems. The commission did not make any changes to the rules as a result of this comment.

Commenters requested clarification of the requirements of §344.30(f) and stated that a plumbing inspector may not be qualified to inspect irrigation systems.

The commission responds that HB 1656 allows municipalities and water districts to employ or contract with plumbing inspectors. HB 1656 did not authorize the commission to require additional

training of the plumbing inspectors. While a plumbing inspector may not be knowledgeable of all aspects of irrigation, municipalities and water districts may require additional training to ensure that their employees are knowledgeable about landscape irrigation. The commission did not make any changes to the rules based on these comments.

Some commenters supported allowing cities to adopt more stringent ordinances if needed. An individual stated that all municipalities should implement landscape irrigation programs. An individual questioned whether or not a smaller municipality or other districts could hire an independent irrigation inspector.

The commission responds that municipalities with a population of 20,000 or more and water districts may adopt more stringent requirements in their local ordinances or rules than these minimum standards. The statute does not prohibit municipalities with a population of less than 20,000 from establishing local minimum standards for landscape irrigation systems. Smaller municipalities or districts may hire an independent irrigation inspector. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that TCEQ should prohibit the practice of requiring all ditches to be open with PVC pipe installed writing side up.

The commission responds that the adopted and previous rules have never required ditches to be open with PVC pipe installed writing side up. This may be a local requirement. The commission did not make any changes to the rules as a result of this comment.

Business Owners and Irrigators-in-Charge

Some commenters requested more definition and clarity of an "irrigator-in-charge. A commenter questioned the use of the word "irrigator" in §344.64(a) and recommended that the correct usage is "irrigator-in-charge". A commenter stated that the phrase "irrigator-in-charge" should be added to §344.35(b), (c) and (d). A commenter stated that §344.71 should be changed from "irrigator" to "irrigator-in-charge". A commenter stated that the warranty references to "irrigators" should be changed to "irrigator-in-charge". A commenter stated that the provisions of §344.72(c) related to warranties for maintenance, alteration, repairs, or service were not needed since the provision was covered by an irrigator-in-charge.

The commission responds that an "irrigator-in-charge" role is to oversee irrigation services for an exempt business owner. The irrigator-in-charge would be responsible for all irrigation worked performed by the business owner. An exempt business owner must comply with the entire Chapter 344 rule requirements which include hiring a licensed irrigator to supervise the business's sale, design, consulting, installation, maintenance, alteration, repair, and service of irrigation systems. An irrigator-in-charge can work at his own business and for one exempt business at any given time. The irrigator-in-charge can perform all of the duties pointed out by the commenters for the exempt business owner. The commission did make changes to the definition of "exempt business owner" in §344.1(25) as a result of these comments to clarify that the irrigator-in-charge is employed by an exempt business owner.

Some commenters requested clarification of §344.34(c) asking if multiple crews at multiple job locations at the same time could work under one irrigator-in-charge. Some commenters stated that §344.34(c)

should allow a licensed irrigator to work for numerous companies. Additionally, some commenters stated that the company should not be held responsible for having an irrigator-in-charge if they had an irrigator perform irrigation work. A commenter stated that a licensed irrigator should be able to work for as many companies as he or she wanted and that the responsibility should follow an individual. Some commenters stated that it is impossible for one person to oversee every aspect of an irrigation company and that the irrigator obtaining the permit should be responsible for the project or share responsibility with the irrigator-in-charge.

The commission responds that an irrigator-in-charge, working for an exempt business owner, may have multiple crews at multiple job locations at the same time. A licensed irrigator may work for an unlimited number of companies. The "irrigator-in-charge" designation applies only to those irrigators working for an exempt business owner. An irrigation company owned and operated by a licensed irrigator does not need to designate an irrigator-in-charge. Therefore, the irrigator-in-charge must limit his work with multiple irrigation entities to a level that he can reasonably provide supervision to ensure that the design and installation of irrigation systems are correct, that sales, consultation, providing customer service, obtaining permits, scheduling inspections and other related activities are appropriately supervised. The commission did not make any changes to the rules as a result of these comments.

A commenter requested clarification of 1) the responsibility of the irrigator-in-charge and irrigator working from an irrigation design prepared by a licensed irrigator and exempt landscape architects and engineers; and 2) the role of the irrigator-in-charge as the sole irrigator responsible for activities.

The commission responds that if an irrigator-in-charge, as designated by an exempt-business owner, or irrigator working from an irrigation design prepared by an irrigator, exempt landscape architect or engineer and installs the irrigation system as designed, the designing irrigator is responsible for the design of the system meeting state requirements. If the irrigator-in-charge, as designated by an exempt business owner, or irrigator makes changes to the irrigation system that degrades the design resulting in the system failing to meet the state standards, the installing irrigator-in-charge or irrigator is responsible for the system. The commission did not make any changes to the rules as a result of this comment.

Commenters asked if a business owner could sell an irrigation system without an irrigator's license.

Commenters asked for clarification of an exempt business owner as the sole entity financially responsible for all irrigation activities and irrigation records. Commenters stated that §344.31 should address selling and connecting an irrigation system to the water supply. Commenters requested that language be added to clarify the role of an exempt business owner and that the business owner is responsible for all actions of the irrigator-in-charge while the irrigator is employed by the exempt business. Some commenters supported removing the provision for an irrigator-in-charge in the exemption for business owners.

The commission responds that an exempt business owner must employ a licensed irrigator, designated as an irrigator-in-charge, to be responsible for all irrigation activities conducted by the business. Since the irrigator-in-charge is designated by the exempt business owner to supervise all landscape irrigation activities, the irrigator-in-charge is responsible for those duties outlined in §344.35. The exempt business owner will be financially liable for irrigation activities and for irrigation records. The irrigator-in-charge is responsible for any enforcement actions that may be

taken related to the sale, design, consultation, installation, maintenance, alteration, repair and service of irrigation systems, under the irrigator-in-charge's supervision. The day-to-day activities of supervision and direction of an installer or irrigation technician, selling, designing, obtaining permits, installing or servicing irrigation systems requires the full attention of the irrigator-in-charge. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that a definition for "business owners" should be added.

The commission responds that the term "business owner" is defined in Texas Occupations Code, §1903.002(c)(10) as "an owner of a business that employs an individual described by Subchapter F of this chapter who is licensed under Chapter 37, Water Code, to supervise the business's sale, design, consultation, installation, maintenance, alteration, repair, and service of irrigation systems". The licensed person in the reference is a licensed irrigator. The commission did not make any changes to the rules as a result of this comment.

Irrigators, Installers, and Irrigation Technicians

Some commenters stated that the responsibilities needed to be clarified to address an irrigator that performs only design work and an irrigator that performed only installations.

The commission responds that an irrigation designer is responsible for using the stamp or rubber seal appropriately, designing irrigation systems that comply with state laws and local regulations, determining the appropriate backflow prevention method for each irrigation system installation, maintaining landscape irrigation system records, developing irrigation plans that comply with the

requirements of Chapter 344, ensuring that when selling or consulting that the requirements of Chapter 344 are met and providing advertisements and contracts that comply with the Chapter 344 requirements. Changes were made to §344.35(d) and §344.63(2)(D) to clarify the separation of responsibilities for an irrigator that performs only design work. In addition, the language in §344.43 has changed to separate the responsibilities of an irrigator that performs design work and an irrigator that installs irrigation systems and to address the use of "design". The language in §344.43(b) has been changed to read "The presence of the irrigator's seal displayed above the irrigator's signature and date on any document constitutes the acceptance of all professional responsibility for the document and the irrigation services performed by the irrigator in accordance with that document". The change in the language reflects the acceptance of responsibility for the installation or design. The word "should" is enforceable since the investigator will be able to determine whether or not the work performed by a second irrigator is clearly identified. Changes were made to the rules as a result of these comments.

A few commenters requested clarification related to §344.35(d)(12), asking if a controller had to be replaced by another irrigator, whose sticker would be placed on the new controller.

The commission responds that the sticker would provide information to the irrigation system owner about the warranty period and information to contact the irrigator. If the irrigator is replacing a controller installed by another irrigator, it may be assumed that the original warranty is no longer valid. The irrigator installing the new controller would use his sticker for contact, should there be a controller warranty issue. The commission did not make any changes to the rule based on the comments.

A commenter stated that "water audits" should be added to the list of duties that an irrigator can perform, be listed in the license requirements, and in the definition of "irrigator".

The commission responds that water audits are the on-site survey and measurement of irrigation efficiency and the generation of recommendations to improve water management efficiency. TCEQ encourages the use of water audits as a tool to reduce water consumption. Since water audits were not part of the original proposal and including the task at adoption could be considered increasing the scope of the irrigator's job functions, the Administrative Procedure Act precludes making such changes without adequate public notice. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that the definition of "irrigation technicians" was the same as the definition of "licensed irrigator" except that licensed irrigation technician could not design, sell or offer consultation on irrigation systems and this was redundant and a waste of time.

The commission responds that it better serves the definition to specify those responsibilities which the technician can perform, rather than to state he can perform all the responsibilities of an irrigator except to provide designing, selling, and consulting services. The commission did not make any changes to the rules as a result of this comment.

Some commenters suggested an alternative approaches such as multi-levels or of using an apprentice that would become a technician.

The commission responds that the suggested alternative approach of a multi-tiered license is outside the scope of the proposed rulemaking and including these changes at this point could be considered increasing the scope of the rules which could have a significant impact on existing and prospective applicants. The Administrative Procedure Act precludes making such changes without adequate public notice and giving parties an opportunity to comment on such issues. The commission did not make any changes to the rule as a result of this comment.

Some commenters stated that §344.34 was not enforceable because of the use of the word "may" rather than "should, must or shall".

The commission responds that the word "may" was changed to "shall" in §344.34(a) as a result of this comment.

An individual stated that "selling" should be included in the definition of irrigation services.

The commission concurs with the comment and has added the term "selling" to the definition of irrigation services in §344.1(20). The commission made changes to the rules as a result of this comment.

A commenter stated that all dates in §344.30 and §344.36 should be 2010.

The commission responds that the rules will go into effect on January 1, 2009, as mandated by HB 4/SB 3. The requirement to have a licensed irrigator or licensed irrigation technician on-site at all times during the installation, maintenance, alteration, repair, or service of the irrigation system will begin on January 1, 2010. That part of the rules was phased-in to allow time to develop the training, testing and licensing of sufficient irrigation technicians to meet the anticipated demand. The commission did not make any changes to the rules as a result of this comment.

Commenters stated that the duties of the irrigation technician should be changed to allow the irrigator time to perform other duties.

The commission agrees that the irrigation technician may assist the irrigator by sharing responsibility in the field. The language in §344.36 allows the irrigation technician to perform those duties. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that a "final walk through" should be added to the irrigator's responsibilities in §344.35(d).

The commission responds that the language is sufficient to allow the irrigator to perform the "final walk through" if the irrigator chooses to perform the duty. The commission did not make any changes to the rules as a result of this comment.

Irrigation Inspectors

Some commenters stated inspectors should not verify irrigation technician licenses.

The commission responds that the commission is granted authority under Texas Occupations Code, §1903.053 to administer the landscape irrigation program that includes enforcement. HB 1656 grants authority to municipalities and water districts to employ or contract with a licensed plumbing inspector, licensed irrigation inspector, or district operator for water districts, to enforce the adopted ordinances or rules. Verification of licenses is within the enforcement authority granted to the commission, municipalities, and water districts. The commission did not make any changes to the rules as a result of this comment.

An individual stated that an inspector's duties should be changed to include a reference to the required design on-site.

The commission responds that the requirement to have a design on-site is covered in §344.61(a) and does not need to be included in §344.37(b)(3). The commission did not make any changes to the rules as a result of this comment.

Seal

IA and an individual stated that §344.40 could be interpreted to mean that the irrigator should have the seal at all times. Another commenter requested modification to include "stamp" because a seal seemed to indicate a metal embosser.

The commission responds that the intent of §344.40 is that an irrigator should not engage in any landscape irrigation services without the physical possession of a seal and the license. The irrigator

should have the seal available for use on documents. The use of a stamp that meets the requirements of §344.41 is acceptable. The commission did not make any changes to the rules as a result of these comments.

IA requested clarification of the requirement to produce the seal within two days of the request.

The commission responds that irrigators are no longer required to submit to the executive director a duplicate impression of his seal on letterhead or business stationery or to notify the executive director of any changes in the seal. Since the irrigator is no longer required to submit the impression, the commission or another governmental entity may request a copy of the seal impression to investigate complaints. It should be noted that the requirement to provide records has been changed to provide records within ten business days. The commission did not make any changes to the rules as a result of this comment.

IA stated that the seal should not be required on the maintenance checklist. A commenter stated that the seal should be treated as a liability.

The commission responds that the maintenance checklist is a key item in educating irrigation system owners about the proper use of the irrigation system. The seal is not a liability. The use of a seal on documents usually indicates the acceptance of professional responsibility for the document and a professional service performed in connection with the document. The seal is an ethical and professional requirement that is used to hold a licensee to a higher standard of conduct and performance. The commission did not make to the rules as a result of these comments.

Some commenters stated that the only items that require a stamp are irrigator generated documents.

The commission responds that items that are not irrigator generated documents such as a manufacturer's warranty should not be sealed. The commission did not make any changes to the rules as a result of these comments.

Some commenters questioned if an irrigator should seal all pages of plans and specifications.

The commission responds that irrigators should seal only the cover or index page of a set of bound documents. A bound document could be stapled, glued or in a binder. If the document does not have a cover or index page or if the document is unbound, all pages should be sealed. Electronic documents should have the seal on each page. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that anyone could get a stamp or seal and asked why the seal was important.

The commission responds that the presence of the irrigator's seal and signature constitutes professional responsibility for the document and the irrigation services performed in accordance with the document and certifies that the system was properly installed. Upon being licensed by the commission, each irrigator is required to obtain a seal. Licensed irrigators may not engage in any landscape irrigation services without the physical possession of the seal and license. Any unlicensed person using an irrigator's stamp or seal or a licensed irrigator that does not use the stamp or seal

appropriately is subject to enforcement action by the commission. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that the preamble stated that the irrigator's signature should be below the seal, but §344.61 stated the signature should be over the seal, and §344.43 stated that the signature should be above the seal. A commenter stated that the location of the signature should be clarified so that the signature would not hide the name and license number of the irrigator.

The commission responds that the language in the preamble has been changed to reflect the correct location of the irrigator's signature, beneath the seal. The language in §344.61 related to seals and signature has been repealed effective January 1, 2009. The location of the irrigator's signature (beneath the seal) will not hide the name and license number of the irrigator. Changes were made to the preamble as a result of this comment.

A commenter stated that scanned signatures should not be applied to drawings because the signature can be applied by someone else without the irrigator looking at the drawing.

The commission responds that scanned signatures can be applied by someone else just as the irrigator's seal or stamp can be applied by someone else without the irrigator's review. The presence of the seal above the signature and the date indicate the irrigator's acceptance of professional responsibility for the document and that irrigators are responsible for the security of the seal. The commission did not make any changes to the rules as a result of this comment.

Backflow Prevention

Numerous commenters stated that the y-type strainer should be located on the inlet side of the backflow prevention device, some commenter stated a strainer was not needed, or was needed when water was from a lake, river, pond or well.

The commission responds that the purpose of a y-type strainer is to prevent debris from going into the double check valve and possibly preventing the double check valve from operating correctly to prevent contamination of the water supply. The y-type strainer should be located on the inlet/supply side of the double check assembly. A change was made to §344.50(e)(3) the rules to indicate the correct location of the y-type strainer.

Some commenters supported locating double check valves underground, one commenter stated that some double checks have ferrous plugs and installation below ground could create problems and other commenters stated the double check backflow prevention device should be installed above ground.

The commission responds that double check valves may be installed below ground per industry standards. In order to be in compliance with §344.50(e)(2), test cocks on double checks installed below ground are to be made of non-ferrous material. Irrigation systems that do not have chemicals injected into the system are a non-health hazard, so a double check valve is acceptable. Local areas may have more stringent standards. The commission did not make any changes to the rules based on these comments.

Some commenters stated backflow devices should be tested annually. One commenter requested clarification of why an irrigation system was not considered a high hazard. Another commenter requested language that would clearly state all backflow devices had to be tested at installation.

The commission responds that in a health hazard situation where there is the potential to introduce a substance into the potable water supply that could cause death or illness, spread diseases, or that has a high probability of causing death, illness, or spreading diseases, the backflow prevention device must be inspected annually. Backflow prevention devices that are used in situations that are identified as non-health hazard must be tested upon installation. Local areas may adopt more stringent standards that would require a test annually or at another interval. The Chapter 344, Landscape Irrigation rules are consistent with the requirements of the Public Drinking Water in Chapter 290 rules which identify irrigation systems without chemical additives as non-health hazards. The commission did not make any changes to the rules as a result of these comments.

A commenter asked for clarification of why other backflow prevention devices are allowed if a chemical is added to an irrigation system. An individual questioned if §344.51(a) had always been a reduced pressure principle. A commenter stated that "chemical" should be defined.

The commission responds that a reduced pressure principle backflow prevention assembly device is the most effective mechanical assembly. The reduced pressure principle backflow prevention assembly device is required when a chemical is added to an irrigation assembly. The definition of "chemical" has not been added to the rules since it is taught in basic irrigation training course. The commission did not make any changes to the rules as a result of these comments.

Cross-Connections

A commenter stated that the definition of "cross connection" in §344.1 and §290.8 were different and that an actual or potential connection is not the same as a physical connection.

The commission responds that the definitions found in Chapter 344 are specific to the Landscape Irrigation Program. The definitions found in Chapter 290 apply to Public Drinking Water Systems. Certain terms are defined in both chapters, but due to the different focus of these chapters, the definitions have been tailored to either landscape irrigation or public drinking water systems. When evaluating compliance with the regulations of these two chapters, individuals should ensure that the definitions being used correspond to the appropriate chapter. The commission did not make any changes to the rules as a result of this comment.

Some commenters support the restrictions on cross connections. Some commenters stated that the way §344.51(b) was written would discourage rainwater harvesting and the interconnection of potable and non-potable water source should be allowed if a reduced pressure principle backflow prevention device was installed. A commenter stated that adding an isolation valve and limiting the connection to a secondary back-up supply, one source at a time should be allowed. Some commenters questioned why the language was included. A commenter requested clarification of the requirement in §344.51(b) that would prohibit the interconnection of potable and non-potable water sources in an irrigation system and stated that proposed §344.75(c) allowed the interconnection through a "high health hazard" backflow prevention device.

The commission responds that §344.75(c) will be repealed through this rulemaking. Based on these comments, however, a change was made to §344.51(b) to allow the interconnection of a potable and non-potable water source with a reduced pressure principle backflow prevention assembly or an air gap. A change was also made to remove §344.65(3) to allow the use of reclaimed water in irrigation systems connected to the potable water supply if a reduced pressure backflow prevention device or air gap is used.

A commenter stated that the difference between "aspirated" and "injected" additives should be clarified and a commenter stated that §344.51(a) should be modified to include the phrase "or injected", while another commenter stated that §344.51(c) should be modified to include the phrase "induced during the manufacturing process" to better clarify the rules.

The commission responds that the reduced pressure principle backflow prevention assembly device is the most effective backflow prevention device, therefore the reduced pressure principle backflow prevention assembly device is required whenever chemicals are added (by aspiration or injection) to an irrigation system. The commission agrees that §344.51(c) should be modified to include the phrase "aspirated, injected, or emitted from a chemical delivery system" to clarify the requirement that a reduced principle backflow prevention assembly is needed for any type of chemical used in conjunction with an irrigation system. The modified language has been added to §344.51(c) as a result of these comments.

A commenter stated that §344.75 conflicts with §344.51(b) and that the term "high health hazard" should be changed to "health hazard".

The commission responds that the language in §344.75 is repealed by this rulemaking. The commission has adopted §344.51 to replace §344.75. Section 344.51 does not contain the term "high health hazard", the commission did not make any changes to the rules as a result of this comment.

A commenter stated that "major maintenance, alteration, repair, or service" was defined but was not used in the rules and recommended using the phrase in §344.36(d)(2). Several commenters supported the requirement to require a backflow prevention device during major maintenance, alteration, repair, or service was conducted.

The commission responds that "major maintenance" was used in §344.52(a) which describes when a backflow prevention device must be installed during the maintenance, alteration, repair, or service of an irrigation system. An irrigation technician may provide on-site supervision of all maintenance activities so the term "major maintenance" was not added to §344.36(d)(2). The commission did not make any changes to the rules as a result of this comment.

A commenter stated that §344.52(c) which requires an irrigator to test the backflow prevention device prior to being placed in service, should have "in service" defined, and another commenter stated that irrigator should be given 30 days to provide the test report to the water purveyor.

The commission responds that the language in §344.52(c), the term "in service" refers to when the irrigation system is fully operational, has been successfully tested, and verified acceptable for use. The irrigator should schedule and coordinate the test of the backflow prevention device with the

backflow assembly tester to protect the water supply. The irrigator should be able to provide the test report to the water purveyor within the ten business days provided in §344.52(c). The commission did not make any changes to the rules as a result of these comments.

Design and Installation Requirements

Spacing - some commenters stated that sprinkler heads should be installed no closer than two inches from a hardscape rather than four inches and one commenter stated that the term "impervious surfaces" covers everything and the list is not needed. Some commenters supported changing the requirement that the area where the above ground emission devices shall not be installed should be four feet or less in length or width some supported five feet or less, one commenter supported eight feet or less, and some suggested clarifying the way the area would be measured. A commenter stated that watering across narrow impervious surfaces should be considered in certain situations.

The commission responds that pop-up spray or rotary emission devices that are closer than four inches to a hardscape waste water because there is some water back throw from emission devices. Allowing four inches of spray will allow more soil to absorb the water. The examples of impervious surfaces were meant to clarify and provide examples of items that the commission considers to be an impervious surface. The commission agrees that there are strip nozzles that can cover areas that are 48 inches or less without watering hardscapes and has changed the rules to allow the 48 inches requirement, but has altered the language to ensure that the measurement relates to soil and not curbs, pavement or other hard surfaces. The commission also recognizes exceptions from the requirements in some limited instances, such as narrow meandering paved walkways, jogging paths, golf cart paths, cemeteries, or other small impervious areas that should be exempted from

the requirement because more water would be used in avoiding spraying water onto the surface than the small amount that might run off the paved surface. The commission changed §344.62(b)(2) and added §344.62(b)(3) to address the concerns. The commission made changes to the rule based on these comments.

Water pressure - Some commenters requested clarification of the water pressure requirement related to emission devices.

The commission responds that the intent of the rules is to clearly state that the installation of an emission device that operates below the minimum or above the maximum sprinkler head pressure published by the manufacturer is a violation of the Chapter 344 requirements. Flow control valves, a pressure regulator, or pressure compensating spray heads are methods that could be used if the pressure is too low. The commission did not make any changes to the rules as a result of these comments.

Piping - One commenter stated that the requirement should be completely revised to reflect mainline and lateral line piping. Another commenter disagreed with the preamble's phrase "thus wasting water". A commenter stated that main line and lateral piping would have to be sized.

The commission responds that the purpose of the limit is to minimize the surge damage done to pipes, which can lead to breaks and leaks which lead to wasted water. The accepted limit in irrigation design is five feet per second for PVC pipe. The national IA's "Foundations of Landscape Irrigation Design" states that the velocity limit technique is the most common method to size pipe.

Placing the commonly accepted industry practice in the rules will lead to long term water conservation. The commission did not make any changes to the rules as a result of these comments.

Zones - Some commenters asked for clarification of "hydrological requirements", "plant material", "microclimate", and "topographic". A commenter opposed requiring separate zones based on plant and soil type. Some commenters stated that irrigation zones should not be based on microclimate, hydrological requirements, and soil conditions. One commenter stated that the rules would create more zones than were needed. Another commenter stated that the requirement is too vague from an enforcement standpoint.

The commission responds that HB 4/SB 3 directed the commission to adopt rules that address the design and installation of irrigation systems and water conservation. Correctly addressing the hydrological, plant material, microclimate, and topographic requirements are key components of design, installation, and water conservation. The commission considers microclimate to be items like structures, paved areas, shade, wind conditions, or direct sunlight. Topographic conditions refer to the slope (which can influence the pressure of the sprinkler system) and the elevation (related to runoff) and grade (a slope in connection with drainage). Hydrological requirements are the groupings of like emission devices so that the maximum gallons per minute of available flow is not exceeded and performing the calculations to determine that the system will operate efficiently. The IA's "Foundations of Landscape Irrigation Design" manual dated March 2002 states that the basic information that should be discussed with the owner (or owner's representative) includes hydrozones and microclimates (page 4 and 5). The document explains that a hydrozone is an area containing plants that will be irrigated on the same schedule using the same irrigation method. The

commission considers turf, trees, and flower beds as areas that should be on different zones. The manual explains that the information may be obtained from a planting plan or an actual site survey. The manual also states that "microclimates are relatively easy to identify" and that the variations in environmental conditions are important to sprinkler selection, zoning and scheduling. These concepts are taught in basic irrigation courses and continuing education courses that are required to maintain irrigation licenses in Texas. These items can be observed and documented, so they can be enforced. A trained inspector will be able to tell the difference between a poorly designed and installed irrigation system that would have trees and turf on the same zone. A trained inspector can observe differences in a microclimate and determine if the system has been zoned appropriately. The commission did not make any changes to the rules as a result of this comment.

Matched precipitation rates - A commenter stated that the requirement should include a performance standard, such as within 20%.

The commission responds that §344.62(f) requires that zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate to ensure uniform application of water. Not having a matched precipitation rate will result in over watering or under watering areas of the zone. The commission did not make any changes to the rules as a result of this comment.

Spraying water - A commenter stated that the requirement should be removed because on-the-job training would address the requirement. Two commenters said the rule would be impossible to enforce. One

commenter recommended not allowing a design with overspray in a zero wind condition. Another commenter stated that a tolerance factor should be provided.

The commission responds that any violation that can be observed and documented can be enforced.

Trained inspectors know that even well-designed and installed systems may overspray when it is windy. They will also know that the law is intended to address systems which are designed and installed poorly without regard to surrounding impervious surfaces. An example of a poorly designed and installed irrigation system would have a full circle emission device located next to a driveway or sidewalk and spraying on the driveway or sidewalk compared to a well designed and installed irrigation system that has a quarter circle emission device located next to a driveway but spraying on the driveway. The agency removed minimum wind derating standards from the adopted rules because the requirement was dated and new technology can address the issue. The commission agrees that on the job training will help improve the quality of the irrigation systems installed. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that the requirement should be modified to not allow water to run into a municipal storm drain.

The commission responds that the adopted rules will reduce the runoff to municipal storm drains by minimizing the spray of water on sidewalks, streets and other paved surfaces as contained in §344.62(g). The commission did not make changes to the rules as a result of this comment.

Master Valve - Some commenters supported requiring master valves, other commenters requested clarification of the requirement (if any) and suggested alternative language, some commenters stated that the rule could not be enforced. An individual stated that the language in §344.62(h) should be changed from "if required" to "when required" to correctly reflect where the master valve should be located. Another commenter stated that the master valve does not conserve or protect the water supply.

The commission responds that a master valve closes when leaking water is detected. There are instances where a master valve may be installed, such as when an irrigation system is installed at a second home or when the owner is a frequent traveler and would not see that the irrigation system is malfunctioning. When leaking water is detected, a master valve controls the flow of water to the remainder of the irrigation system. When the irrigation system does not operate, the master valve is closed, so the irrigation system is not under pressure. Since the irrigation system is not subject to constant pressure, the system should last longer. This conserves water. In response to these comments §344.62(h) has been changed to read, "When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations".

PVC pipe primer solvent - Numerous commenters supported removing the requirement, a commenter stated that on-the-job training would address the requirement and another commenter stated that requirement was not enforceable. Some commenters suggested making the requirement optional. Some commenters supported the requirement with some changes such as in accordance with manufacturer's guidelines or in accordance with plumbing codes. A few commenters did not support requiring the use of purple primer. IA commented that colored primer should not be required on any pipes that are above ground. A commenter stated that colored primer will not promote water conservation.

The commission responds that primer helps to prepare PVC pipe for cement to ensure a long-lasting connection. If primer is not used, the connection may degrade faster and cause leaks that lead to wasted water. Some manufacturers have stated that primer may not be needed in some instances. To be consistent with various manufacturers recommendations, the rule language is being changed to reflect that primer should be used in accordance with either the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605). The use of colored primer on pipes that are above ground could be unsightly if the primer is not applied correctly. The correct application of primer will result in a faint purple cast less than an inch wide on the pipe. The use of colored primer will allow an inspector to easily identify that primer has been used. Changes were made to §344.62(i) as a result of these comments.

A commenter stated that the correct reference should be "primer and solvent".

The commission responds that the correct term is "primer and solvent" however, the industry jargon is "primer solvent" so that term was used. The commission did not make any changes to the rules as result of this comment.

Rain or moisture shut-off device - A commenter stated that automatic weather or sensor based controllers should be used on all installed systems and that a large system should be solar powered and isolated from the electrical grids if possible and provided suggested alternative language. A commenter suggested a definition of "weather or sensor based irrigation controller".

The commission responds that there is insufficient information on the EPA's WaterSense program's expectations or specifications for controllers at this time, and is therefore reluctant to mandate their required use until the specification is developed. The commission supports the use of solar powered controllers, and encourages governmental entities to consider their use when practicable. Since weather or sensor based irrigation controllers are not required, a definition is not needed. The commission did not make any changes to the rules as a result of this comment.

Commenters suggested deleting the requirement for rain or moisture sensor or other technology because on-the-job training can address the requirement and it would be impossible to enforce. A commenter supported the requirement to install rain sensors. Other commenters stated that sensors should be required but not in the El Paso or West Texas area because of the area receives little rainfall. Another commenter stated that language could be added that would allow areas of the state with extreme climates dictate the type of sensor used.

The commission responds that the counties of El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, Terrell, Loving, Winkler, Ward, Reeves, Ector, Crane and Pecos have low annual rainfalls (according to the 2006-2007 Texas Almanac) and have been exempted from the requirement to have a rain or moisture shut-off device or other technology. A trained inspector can verify that a rain or moisture shut-off device or other technology is installed and operational so it can be documented and is enforceable. The commission has changed §344.62(j) based on this comment.

Some commenters supported a rain/freeze sensor on every irrigation system.

The commission responds that the requirement for a freeze sensor was considered. The use of a freeze sensor is more responsive to safety issues than to water conservation. The determination to require a freeze sensor is best made at the local level. The commission did not make any changes to the rules as a result of this comment.

A few commenters stated that rain moisture or shut-off devices should be required on irrigation systems that are repaired as well as those that are replaced.

The commission responds that an irrigator should inform customers of the potential water and cost savings involved in adding sensors to systems that are repaired. Because adding sensors can include laying additional wire from the sensor to a controller, the addition of a rain or moisture shut-off device or other technology could cost the consumer much more than the original requested repair. A requirement to retrofit irrigation systems was not included in the proposal. Local areas may have requirements that would require the installation of a rain or moisture or other shut-off device. The commission did not make any changes to the rule as a result of this comment.

A commenter stated that it should be clarified that water purveyors could require other devices.

The commission responds that the rules are minimum standards and water purveyors may require other technology. The commission did not make any changes to the requirements as a result of this comment.

A commenter stated that excess flow sensors should be required as shut-off sensors for large systems (greater than or equal to one acre).

The commission responds that while there may be a benefit for some systems, an excess flow sensor is not being mandated state wide. The sensors may be mandated locally as necessary to help ensure water conservation goals and objectives are met. The commission did not make any changes to the rules as a result of this comment.

Isolation Valve - Some commenters supported requiring an isolation valve, some supported requiring all irrigation systems to have an isolation valve. Some commenters said that training could replace the requirement and that the requirement could not be enforced. A commenter suggested requiring that the isolation valve have a "lock out" feature. One commenter stated that an isolation valve does not conserve water. One commenter requested a definition of "isolation valve".

The commission responds that local government representatives strongly supported the requirement to have an isolation valve so that water to the residence or commercial building would not be interrupted while turning off the water to a malfunctioning irrigation system. Local areas can require a "lock out" feature on isolation valves. An "isolation valve" is a shut off point for all water in the irrigation system. The isolation valve will allow a system owner to easily turn off water to the irrigation system when leaks are detected. This will conserve water. A requirement to retrofit a system to add an isolation valve was not included in the proposal because it could increase the cost of repairs or maintenance or alteration to the irrigation system. However, local areas may have more stringent requirements. Trained inspectors will be able to observe the isolation valve and

determine compliance with the requirement. The commission agrees that on-the-job training will be needed to respond to the new rules. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that an additional main shutoff valve be required if the system is not on a separately valved meter or if the backflow prevention device does not have a shut off valve. A commenter stated that the requirement should specify whether or not the required isolation valve can be supplied as part of the backflow assembly.

The commission responds that the rule requires only an isolation valve between the water meter and the backflow prevention device so that the water can be turned off to the irrigation system if the backflow prevention device is being repaired or replaced or the irrigation system is malfunctioning. The commission did not make any changes to the rules as a result of this comment.

Depth Coverage of Pipe - A commenter stated that parts of Texas have very rocky or even solid rock a few inches below the existing soil and that mounding dirt over the pipe and wire should be allowed. IA commented that a better definition of "returned to grade" was needed.

The commission responds that the purpose of requiring the fill material to be returned to the original grade was to prevent a safety hazard with fill material that was not level. In the instance described by the comment, mounding the dirt to provide adequate coverage would be sufficient. The contract and as-built drawing should contain information clearly identifying the reason that the dirt would be mounded over the pipe or wire. The irrigator should also consider whether or not

there would be any additional maintenance requirements or recommendations for the irrigation system owner as a result of the mounding. The irrigator should also work with the irrigation system owner to address all safety concerns related to mounding dirt over the pipe or wires. The term "returned to grade" is the highest (pre-installed irrigation system) ground level immediately adjacent to the pipe or wire being covered and should be compacted sufficiently to be at grade at the time the irrigation system is completed. Changes were made to the depth of pipe coverage requirements in §344.62(1)(1) as a result of this comment.

Commenters suggested a definition of "select backfill". A commenter stated that a definition of "compaction" was needed.

The commission responds that the definition of backfill, "free of building debris and rocks larger than two inches" is an industry standard and is taught in basic irrigation training courses and in continuing education courses needed to maintain irrigator licenses. "Compaction" or compressing backfill is taught in basic irrigation courses and continuing education courses that are required to be licensed to perform irrigation work in Texas. The commission did not make any changes to the rules as a result of these comments.

Wiring irrigation systems - A commenter stated that the wording related to electrical wiring splices, should be changed to "which may be exposed".

The commission responds that §344.62(m)(3) has been made to change the phrase to "which may be exposed" in response to the comment. The change to the rule has been made in response to the comment.

Water in piping - A commenter stated that §344.62(n), relating to water in the piping of an irrigation system being non-potable, was too long and provided an alternative layout.

The commission appreciates the comment. Since the language did not change, the commission did not make any changes to the rules.

Completion of irrigation system installation - A commenter stated that the definition of "Completion of Irrigation System" was not needed since the definition was standard business practice.

The commission responds that the definition is needed to provide clarity to §344.63, Completion of Irrigation System Installation. The commission did not make any changes to the rules as a result of this comment.

Maintenance, Alteration, Repair, or Service of an Irrigation System

Several commenters stated that the requirement in §344.64 to add an isolation valve when repair is done at the water meter or backflow device is unenforceable. A commenter stated that the installation of an isolation valve should be limited to instances when the backflow prevention device is replaced. One commenter stated that §344.64 would require a repair for one broken head to result in a y-type strainer,

backflow device, master valve, isolation valve, rain/freeze sensor, select materials, etc. and would result in lost business.

The commission responds that a change has been made to §344.64(d) to clarify that an isolation valve should be installed when a repair requiring excavation is made at the water meter or backflow prevention device , if an isolation valve is not present. The intent of the rule is that when performing any work on the meter or backflow prevention device that requires excavation, an isolation valve should be installed. This would include situations where excavation work is performed at the meter or backflow prevention device during repair or replacement. An isolation valve will allow water to be shut off to an irrigation system while allowing water to go to a residence or building. Being able to turn off water to a malfunctioning irrigation system will conserve water. The rule does not require a y-type strainer, backflow device, isolation valve, master valve, or a rain/freeze sensor if one broken head is repaired. Instances of non-compliance reported or noted during inspections can be verified by review of homeowner or irrigator records. The adopted section, §344.64(d), was revised to state that excavation work at the meter or backflow device will trigger the installation of an isolation valve on an existing system. The commission made a change to the rule as a result of this comment.

A commenter stated that §344.64 should be changed so that an irrigator would not be held responsible for negligence by the irrigation system owner, another commenter stated the requirement does not adequately place responsibility for the work performed.

The commission responds that the irrigator does not violate §344.64 if the owner is negligent. The irrigator is responsible for all work performed under the irrigator's supervision. The commission did not make any made changes to the rule as a result of these comments.

A commenter stated that §344.64(c) should include "solvent used when solvent welding PVC pipes and fittings" because some components do not require primer or cement.

The commission responds that §344.64(c) has been changed to reflect the modifications made to §344.62(i). Changes were made to the rules as a result of this comment.

Reclaimed Water

A commenter questioned the form of Spanish was required on the sign to comply with §344.65(6), Reclaimed Water. Another commenter stated the actual text should be included in the rule.

The commission responds that the actual Spanish language would be "Agua de recuperación - no beber". The commission made changes to §344.65(b) as a result of the comment.

A commenter stated that §344.65 should have two sections - one for reclaimed water and one for gray water. A commenter stated that §344.65 needed to be revised to address retrofitting an existing system. Some commenters suggested adding new definitions for "well water, recycled water, gray water, rain harvesting and reused water".

The commission responds that gray water and retrofitting of irrigation systems to use reclaimed water were not addressed in the proposed rules. Including changes at this point could be considered increasing the scope of the rules which would have a significant impact on the regulated industry and citizens. The Administrative Procedure Act precludes making such changes without adequate public notice and giving parties an opportunity to comment on such issues. The definitions for recycled water, gray water, rain harvesting, and reused water are not needed since they are not used in Chapter 344. The term well water, as used in the irrigation industry, is any water that is located beneath the surface of the ground and is not under the direct influence of surface water. The commission did not make any changes to the rules as a result of this comment.

Advertisement, Contracts, and Warranty

Commenters recommended deleting the requirement that the name, address, and telephone number of the TCEQ be displayed at the structure where irrigation business was conducted. Some commenters stated that if required, the sign should be provided by TCEQ.

The commission responds that the requirement to display commission contact information is required in the current rules (§344.93(d)), but was slightly modified to indicate the sign should be located at the "irrigation business" rather than at the "business". The requirement is for the purpose of directing complaints. To clarify the requirements, §344.70(c) was modified to include the phrase "for the purpose of addressing complaints". HB 4/SB 3 directed the commission to adopt and enforce rules related to landscape irrigation. In order to properly enforce rules, the public must know that the commission regulates irrigation services in Texas. Other businesses that

have signs for directing complaints are physicians' offices, barber, and beauty shops. The commission made changes to the rule as a result of this comment.

A commenter stated that there is no mention of a license number on a trailer in §344.93 but it was mentioned in §344.70. Some commenters stated trailers should be removed from the rules because they are often rented, another commenter stated that the license number should be required for vehicles and trailers used in the installation, maintenance, alteration, repair, service, permitting or connection of an irrigation system to a water supply. A commenter stated that the advertising requirements should be changed to read "irrigator-in-charge" rather than "irrigator". A commenter requested clarification when multiple irrigators worked for one company.

The commission responds that the license number on a trailer containing advertisements of irrigation services is a requirement of the adopted rules that will be effective January 1, 2009. The language in §344.93 has been repealed. The language in §344.70(a) was changed to clarify the services that the requirement applies to. All vehicles used in the performance of irrigation system installation, maintenance, alteration, repair, or service must display the irrigator's license number. A licensed irrigator will desire to use the trailer to advertise services and would want to make the license number available. An unlicensed irrigator will be unable to provide the license number. Companies with multiple irrigators may comply with the requirement in one of two ways: use the license number of one employee in all advertisements, on all vehicles, etc. or may use any or all of the licensed irrigators' number in advertisements or on vehicles. Changes were made to §344.70(a) and (b) as a result of these comments.

A commenter asked if magnetic signs were allowed.

The commission responds that magnetic signs are acceptable. The commission did not make any changes to the rule as a result of this comment.

Some commenters stated that contracts for the installation of irrigation systems should not be required to be in writing as outlined in §344.71.

The commission responds that HB 4/SB 3 required the commission to adopt rules that address the design, installation, and operation of an irrigation system, the conservation of water, and the duties and responsibilities of an irrigator. A written contract is a responsibility of an irrigator because it clarifies the terms and conditions for the design, installation and operation of the irrigation system. The IA's Handbook states that a written contract is a guarantee of professional work and urges the consumer to insist on a written contract, "no matter what the amount". The commission did not make any changes to the rules as a result of this comment.

Some commenters asked how the "pass-through contract" provisions would be enforced against non-irrigation companies

The commission responds that it is a violation of the Chapter 344 rules for anyone other than a licensed irrigator or exempt person to sell, design, consult, maintain, alter, repair, or service an irrigation system. The commission or locality would take appropriate enforcement action against the unlicensed individual installing an irrigation system. In addition, the definition of "pass-

through contract" in §344.1(36) has been changed to provide clarity to the rule. The commission did not make any changes to the rules as a result of this comment.

Some commenters recommended deleting the requirement that the contract must include the dates the warranty is valid.

The commission responds that it is sufficient to tie the warranty to a specific event, such as 365 days after the maintenance checklist is provided to the irrigation system owner or representative or 180 days after the backflow prevention device is tested. The commission did not make any changes to the rules as a result of the comment.

A commenter stated that the pass-through contract provision prohibiting monetary compensation be changed to clearly indicate that only a licensed irrigator can perform irrigation services.

The commission responds that the pass-through contract provision prohibiting monetary compensation has been removed. Chapter 344 states that only a licensed irrigator can perform irrigation services so it would be redundant to add language to the section. The commission made changes to §344.71(c) as a result of these comments.

Some commenters stated that a written warranty should not be provided to new irrigation system owners and that if provided, the warranty should not contain the irrigator's name, license number, business address, confirmation that the owner received a copy of the warranty and notification that irrigation is regulated by the TCEQ. IA supported removing the warranty requirement since some providers will not

provide a warranty due to site conditions or due to other concerns. Some commenters stated that warranty requirements should be optional. Other commenters stated that the commission should require that the owner be advised whether or not there is a warranty. Some commenters stated that a warranty should be provided. Some commenters stated that a warranty period should be defined. Some commenters stated that irrigation system's owner or owner's representative should not have to sign the receipt of the warranty.

The commission responds that the requirement for a warranty for a new installation has been in the rules for several years (see §344.96). The irrigation system owner or operator must know how to contact the irrigator in order to obtain repairs or adjustments to the irrigation system. The commission agrees that the license number of the irrigator is not needed on the warranty since the irrigator's license number is on the seal and the owner should possess several items with the irrigator's license number and has deleted that requirement from §344.72(b). The commission was directed by HB 4/SB 3 to adopt and enforce rules that relate to the design, installation, and operation of the system, water conservation, and the duties and responsibilities of irrigators. It is appropriate that owners or operators of irrigation systems be able to contact the commission if there are complaints or concerns about the irrigation system. The warranty provides the irrigation system owner or operator an assurance that the new system will operate as efficiently as possible, and that if problems are encountered, that the irrigator will make the repair. Timely repairs will help conserve water. In addition, the IA's Handbook states that a good irrigation contractor will offer a one year written warranty on work performed. Commercial grade irrigation system components are generally warranted by the manufacturer for a period of one, three, or five years. An irrigation system will last twenty years or longer. A system that does not perform as efficiently

as possible will use extra water for the life of the irrigation system. It is acceptable to provide the length of time that the warranty is valid if there is an easily determined trigger date such as the date the Maintenance checklist is signed by the irrigator or the date the backflow prevention device is tested. The commission made a changes to §344.72(b) as a result of these comments to remove the requirement to include the license number in some documents.

Some commenters stated that the warranty requirements should be removed and the seal serve as the guarantee. Other commenters stated that the City of El Paso required a bond and license be submitted to the city or for some occupations to the state as part of license registration requirements.

The commission responds that the requirement for a warranty has been in the rules for several years (see §344.96, Warranties). The warranty provides details and duration to the system owner or operator. The seal would not provide this information. The irrigation system owner or operator must know how to contact the irrigator in order to obtain repairs or adjustments to the irrigation system. The commission is not granted authority under Texas Occupations Code, Chapter 1903.053 to require bonds for irrigators as a condition of license. The commission did not make any changes to the rules as a result of these comments.

Some commenters stated that a warranty will not help water conservation.

The commission responds that a system warranty should represent a commitment for extended service after the sale. Prompt repairs and corrections will help conserve water. There may not be one single item that will help conserve water, but it is the combination of various efforts that

include warranties that will accomplish this objective. The commission did not make any changes to the rules as a result of this comment.

IA commented that breaking down materials and labor when a repair is made will require an accounting change to account for changes in sales tax liability and will create a burden to small businesses. Some commenters stated that time and materials should not be required for service, that TCEQ should not dictate billing procedures, and that time and material details should not be provided. A commenter stated that time and material cannot be determined before hand.

The commission responds that any of the parts that were used in the maintenance, alteration, repair, or service of the irrigation system should be clearly identified on the invoice. This may help the irrigation system owner and irrigator with historical parts records and also help the system owner identify replacement parts to ensure the irrigation system is efficiently maintained and operated. If the irrigation system owner knows that a 30-foot spray emission device was installed, the owner will be less likely to replace it with a 20-foot spray emission device. It is possible to use a "lump sum" invoice and still identify the parts that were used in the repair. Changes to §344.72(c) have been made to not require labor to be included in irrigator documents provided to the irrigation system owner. The change includes requiring the parts that are used to be clearly identified in the invoice provided to the irrigation system owner or operator. Changes were made to §344.72(c) as a result of these comments.

Some commenters stated that a warranty should not be required for maintenance, alteration, repair, or service of an irrigation system, some commenters support optional warranties, and other commenters

support requiring a warranty. Other commenters stated that the owner should be advised that there will or will not be a warranty. Some commenters stated that not all equipment warranties pass-through to the consumer and are a trade warranty obligation only to the provider. IA commented that irrigators could provide a clear statement of whether or not a warranty exists and provide the details of the warranty.

The commission responds that it may be difficult to provide a warranty for items such as reprogramming the controller, performing a water audit, completing an operation inspection or other items. The requirement to provide a warranty for maintenance, alteration, repairs, or service to an existing irrigation system has been removed. Changes were made to §344.72(c) as a result of these comments.

Some commenters stated that the commission should have no authority to require warranties and that warranties and business practices should not be adjudicated by the commission.

The commission responds that one of the most common complaints received by the commission relates to warranty work on irrigation systems. The warranty requirement helps conserve water. A system owner that has warranty coverage is more likely to call the irrigator when the irrigation system malfunctions. Small leaks or over watering is more likely to continue if the owner has no system warranty. Providing a warranty is not only good business practice, it can also result in saving water. The warranty requirement was in the previous rules (see §344.96, Warranties.). The legislature passed extensive laws with regard to the landscape irrigation program, but did not make any changes pertaining to that particular rule. The commission did not make any changes to the rules as a result of these comments.

A commenter requested clarification of "remodeling and renovation" related to warranties.

The commission responds that warranties are required for new system installations. However, the commission would encourage an irrigator to provide a warranty on a remodeling or renovation project that would involve significant new parts and redesign of the irrigation system that was a significant financial investment to the irrigation system owner. The commission did not make any changes to the rules as a result of this comment.

Irrigator Advisory Council

IA stated that excluding individuals involved in leadership in local and state irrigation associations limits the pool of irrigators and could explain some of the resistance to the rules. Some commenters stated that the word "practicing" should be added to §344.80(b). Another commenter stated that "and active in the business" should be added. Some commenters stated that "or consanguinity" should be removed from §344.80(d). A commenter asked for clarification of "officer of a trade association" and asked if a board of trustees' member is eligible for membership.

The commission responds the rule has been changed to be consistent with 30 TAC Chapter 5. The change will be effective January 1, 2009. A board trustee is considered to have some control of decisions made by an association and is considered to be an officer. The rule does not distinguish between statewide and local associations. The term "practicing" was not included in the rule because the language in the Texas Occupations Code, §1903.151(a)(1) does not require "practicing" irrigators. The commission made changes to §344.80 as a result of these comments.

A commenter stated that some council members have not acted fairly or ethically, controlled the flow of information, and will reap financial gain upon adoption of the rules.

The commission responds that there was an August 10, 2007 meeting held in Austin for communicating concerns or thoughts for the rules revision. The council accepted written comments prior to, and after the meeting. The commenters did not provide information to support the allegation that some members of the council will reap financial gain. Volunteer members of the Council canvassed the state for input into the rules process. During a multi-week period two council members visited over ten cities around the state to obtain local input from local associations and irrigators. The council members donated their business and personal time to conduct this outreach effort. The commission did not make any changes to the rules as a result of these comments.

No Authority

A commenter stated that there should be incentives for conserving water and discounts for utilizing devices such as smart controllers, master valves, rain sensors, low-volume and xeriscape designs or water restrictions. These measures would correctly place the responsibility of conserving water on the user since the public is responsible for over watering, watering out of season, and out of ignorance because water costs are so low. A commenter stated that requiring a person to sign a form stating that they are aware that a licensed irrigator must install the system and if an unlicensed individual installs the irrigation the system that the owner and installer can be fined a minimum of \$500.00 and the installer more on each following illegal installation. IA stated that an additional means to protect the public would be to establish an insurance requirement that would define necessary coverage and limits. IA commented that TCEQ should

be added as a certificate holder to each irrigator's insurance policy to facilitate notification of changes or voids in required coverage. IA further stated that if a void, lapse, or a deficiency in coverage happened, the irrigator's license would be revoked. A commenter stated that the majority of defective irrigation systems were designed and installed by unlicensed individuals, and that the commission should restrict the sale of PVC piping in sections longer than four feet to licensed irrigators only, because it would stop illegal installations and asked if the commenter could get credit or a reward for the idea. A commenter stated that new neighborhoods should be required to install reclaimed, gray water and untreated water systems with the sewer lines and that treated water should not be used to water landscapes. A commenter suggested using home owner associations to collect fees to be used to inspect, repair, or replace sprinklers to meet new standards.

The commission appreciates the suggestions but does not have the authority to mandate or implement the suggestions. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that homeowners should not be allowed to install their own irrigation system and stated that homeowners could not perform electrical, plumbing, or even air conditioning without a license.

The commission responds that homeowners that install an irrigation system on their own properties are exempt from the licensing requirements of Texas Occupations Code, §1903.002 but are not exempt from the requirements of Chapter 344, Landscape Irrigation. The commission did not make any changes to the rules as a result of these comments.

Local Authority

An individual commented that the "minimum precipitation rates", including the precipitation rate zone map, be included because some emission devices, installed with low nozzle flow rates, will meet the head to head coverage requirements but will not be able to place enough water on plant material. There are nozzle selections available from manufacturers that would allow someone to create an inefficient system. An individual stated that the minimum standards for precipitation rates should not be removed because they provide a historical benchmark. A commenter stated that irrigated sites that are larger than five acres should be audited once every three years to see if the systems are still effective and efficient in their water use. A commenter stated that the commission should require an annual inspection for irrigation systems similar to the inspection for motor vehicles. A commenter stated that meter readers could verify that inspections had been performed. A commenter stated that more stringent restrictions are needed on new irrigation systems in residential neighborhoods and that low volume/drip systems should be mandatory for flowerbeds in these situations. A commenter stated that major repairs of irrigation systems should necessitate compliance with minimum design and installation requirements. A commenter stated that inefficient water waste of existing systems should be addressed in the rules.

The commission responds that the adopted rules provide minimum standards for irrigation systems statewide and local governmental entities may adopt more stringent requirements. The commission did not make any changes to the rules as a result of these comments.

Administrative Procedure Act

An individual commented that a common source of leaks on irrigation systems is pipe breakage at the base of the sprinkler head and that mandating flexible pipe or swing joint risers below a sprinkler head in

an area subject to vehicular traffic or pedestrian activity would help prevent leaks. A commenter stated that there should be rules for irrigation system operators and that in order to enhance conservation the commission should prohibit the operation of irrigation systems with broken components. An allowance for testing and repair was suggested. A commenter stated that the conversion to irrigation technician should be reconsidered and an assistantship be implemented that would provide more knowledgeable people at the job site. Another commenter recommended implementing an apprentice/journeyman program.

The commission appreciates the suggestions; however, the recommendations are outside the scope of the proposed rulemaking and including these changes at this point could be considered increasing the scope of the rules and would add costs to the irrigation system or to the irrigation system order. The Administrative Procedure Act requires that the public be given the opportunity to comment on rules that might impact them. The public was not notified in the February 1, 2008, *Texas Register* notice that the commission was considering the suggested changes. The public might have commented on any of these suggestions. The commission did not make any changes to the rules as a result of these comments.

Costs

A commenter stated that the increased cost of \$350 to \$580 seemed to be an arbitrary 15% increase. A commenter asked if the cost covered: maintaining records; purchasing permits; buying stickers; design software; training; increased labor costs; etc. A commenter stated that the costs would just about cover the drawing. A commenter speculated that the cost would be greater if the rules are enforced. A commenter stated that fewer rules were needed and that items that add costs or are unenforceable will hurt honest

business owners and will force consumers to seek unlicensed or non-complying contractors and may ultimately discourage compliance.

The commission responds that the costs were calculated by assuming two scenarios – a low and high range. The costs for the "low range" are isolation valve and box - \$14, a rain or moisture sensor - \$28, a y-type strainer - \$27, sticker - \$1, maintenance checklist - \$50, irrigation plan \$210, and miscellaneous costs \$20. The costs for the "high range" are isolation valve and box - \$20, a rain or moisture sensor - \$50, a y-type strainer - \$50, sticker - \$2, maintenance checklist - \$85, irrigation plan \$345, and miscellaneous costs \$28. There will be some up-front costs associated with purchasing stickers; the cost referenced is a cost per job. Many irrigators already perform most of the requirements, so the cost should not increase significantly for items such as colored primer solvent, backflow devices, etc. Market forces will drive the price that is being charged for irrigation systems. If there is a demand for irrigation systems, there will be legitimate irrigators who will comply with the rules. The requirement to maintain irrigation system records is consistent with the requirement for other business records. The commission did not make any changes to the rules as a result of this comment.

Some commenters stated that a customer will be charged \$125 to \$150 to perform the maintenance checklist items.

The commission responds that the irrigator has a business cost associated with the checklist and walk through. Homeowner education and guidance does have a cost. However, the consumer would save money on the cost of water used in irrigation and that would offset any charges that some

irrigators might choose to charge customers. Lower Colorado River Authority provided comments that by operating an irrigation system twice a week, the summer outdoor water use would be decreased by 25% to 50% and would reduce peak demand on water treatment facilities. Those cost savings would be passed on to customers in the form of lower water bills. The IA's Handbook stated that a good contractor will provide full instructions on how to care for the irrigation system and how to use the mechanical components of the irrigation system. The Handbook further stated that "the contractor should know how to manage water and install an irrigation system that will provide the desired look while minimizing your use of water". Many irrigators are already providing these services to their customers. Costs can vary widely across the state depending on factors that affect the local economy. The commission did not make any changes to the rule as a result of these comments.

Some commenters stated that the additional costs were low and that the commission did not specify the water that would be saved.

The commission responds that the commenters did not provide any specific information regarding which costs were low or any alternative findings about cost. The preamble stated that if it was assumed that 25% of water used for irrigation was wasted, a homeowner, on average, could save an estimated \$194 per year when an irrigation system that complies with the rules is installed. Over a five year period the estimated savings could be as much as \$970. The annual water savings was assumed to be 38,000 gallons per system. Another commenter provided detailed drawings and material takeoffs with pricing. The commenter's finding is that the additional materials required as a result of the rule would cost an irrigator \$166.47 and require less than one hour of additional

labor. If the system conserved 25% more water and watered twice a week for ten minutes, the system would save \$20 a month. The commission did not make any changes to the comment based on these comments.

A commenter stated that based on initial startup a permit would cost \$1,000 because employees would have to be hired, trained, and initiate a permit processing system for irrigation. A commenter stated that the cost that had been proposed by the commission was ridiculous and the cost to the municipality for a landscape irrigation program would be high.

The commission responds that the commenter did not provide any additional information to support the claims that the cost to a municipality would be high. When the cities of El Paso and San Antonio adopted more stringent irrigation requirements several years ago, costs for irrigation systems did not increase significantly and many irrigators have installed irrigation systems that meet these requirements for years. El Paso's permitting program cost for a commercial system ranges from \$80 to \$120. San Antonio has proposed a new fee structure that would require an \$85 annual registration fee for irrigation contractors, a \$50 residential permit fee, a \$100 commercial permit fee, \$100 for a commercial irrigation plan review, with an allowance for charging for additional reviews, and a \$50 inspection fee.

El Paso has been inspecting commercial irrigation systems for several years and has simplified the process so that the inspector has an approved irrigation plan and has knowledge of the irrigator's previous performance history. The inspection is based on a local ordinance and the International Plumbing Code 2003 (2008 will be adopted in the future).

The inspector inspects water spraying on impervious surfaces, slopes or small areas. The irrigator may be present during the inspection or if the controller is accessible, the system is turned on and inspected for overspray and for coverage, verifying that the installation is according to the approved plan.

The inspector inspects the master, isolation, or zone valve. The valve locations are shown on the approved plan and are located in valve boxes. The inspector can verify several items at one location - the depth of the incoming pipe, primer, wiring, waterproof connectors, and any additional equipment such as regulators or filters.

The inspector locates and inspects the backflow device for proper installation and use.

The inspector checks that the controller and verifies that the controller is powered and programmed.

The inspector verifies that sleeves are installed and is able to verify that primer is used in that location.

The inspector reviews the approved plan and verifies that the installation has been made in accordance with the city plan.

The inspector has the authority to ask at any time to unearth a specific area or the complete system if noncompliance is expected. El Paso has found improper piping, deleterious backfill, no primer or solvent on pipes, and improper wiring when irrigation systems were uncovered. El Paso has the ability to flag an irrigator based on past occurrences or typical code violations, such as failure to close a permit or failure to call for an inspection. Inspections often occur when the inspector is in the area which allows the inspector to view the installation as it progresses. Irrigators sometimes ask for in-progress inspections. El Paso's permitting system allows the inspector to monitor permits in various stages such as issued, inspected, or final, and plan inspections accordingly. The rules are written so that municipalities and water districts have the ability to implement the landscape irrigation program in an efficient manner, such as phasing-in requirements or conducting more thorough reviews or inspections on higher risk projects. Municipalities and water districts may choose to contract elements of the program to avoid an initial up-front cost. A commercial irrigation system permit in El Paso usually costs \$80 to \$120. The cost is calculated using a base rate and then a per item or per measurement fee. The commenter did not provide any information to support the claim that a permit would cost \$1,000. The commission did not make any changes to the rules based on these comments.

A commenter stated that the fiscal note stated that a controller could be replaced for \$50 to \$100 and stated a cost savings of \$30 to \$50 every time the controller is interrupted, then it should be required because it would conserve water.

The commission responds that §344.62(i) requires the installation of sensors or other technology designated to inhibit or interrupt irrigation system operation during periods of moisture or rainfall

when replacing an existing automatic controller. The example in the fiscal note is that of a very large commercial irrigation system that would have automatic controllers and inhibiting devices that could save the entity \$30 to \$50 per interrupted water schedule. These savings are not representative of a small residential system. The commission did not make any changes to the rules as a result of this comment.

Enforcement

Numerous commenters stated that enforcement of irrigation rules should be a priority. Commenters stated that the current rules should be enforced. A commenter stated that every irrigator wanted a true enforcement program. A commenter requested an analysis of state rules to identify if there is an alternate place in the Texas Administrative Code where rules can be developed that will provide meaningful consequences for individuals practicing without a license. Numerous commenters stated the commission should respond to complaints more timely and with more serious consequences.

The commission responds that these comments are beyond the scope of the Chapter 344 rulemaking. The commission's enforcement's actions are governed by 30 TAC Chapter 70 and the commission's Enforcement Initiation Criteria, and the Penalty Policy. There is no federal standard for landscape irrigation programs. The commission has and continues to pursue enforcement actions against licensed and unlicensed individuals that do not follow landscape irrigation rules. Many irrigation system owners have been reluctant to provide documentation that would prove that an unlicensed person installed their irrigation system. Most of the enforcement actions taken by the state are administrative in nature and in some instances include a minimum penalty. Cities and water districts that adopt landscape irrigation programs will greatly enhance the ability to

pursue rules and violations. The commission did not make any changes to the rules as a result of these comments.

Other comments

A commenter asked TCEQ to "fully" clarify all changes to the rules in an effort to eliminate any loopholes in the system.

The commission responds that the purpose of the preamble is to fully clarify all changes. The commission did not make any changes to the rules as a result of these comments.

Several commenters stated the rules lacked verbiage to be enforceable and that rules should be easy to verify and fairly enforced.

The commission responds the adopted rules improve on the existing rules and provide better clarity and improves enforcement. The rules clearly state the minimum performance expectations for landscape irrigation systems in Texas and clearly define the duties and responsibilities of irrigators, installers, irrigation technicians, and irrigation inspectors. Trained inspectors will be able to take appropriate actions to make sure irrigation systems are designed and installed in a manner that will conserve water. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that the Chapter 344 rules revisions had little to do with water conservation.

The commission responds that the rules adopted comply with the requirements of HB 4/ SB 3 that are intended to increase water conservation. The rules address the design, installation, and operation of irrigation systems, water conservation, the duties and responsibilities of irrigators. The rules also address the requirement that municipalities with a population of 20,000 must adopt a landscape irrigation program and provide a new license type, irrigation inspector. The rules as adopted and their implementation will conserve water. The commission did not make any changes to the rules as a result of this comment.

Several commenters stated that illegal installers will be able to charge homeowners less for an irrigation system and that small firms could not compete with unlicensed firms or individuals who would not follow the rules. Other commenters stated that there will be fewer legitimate irrigators. Some commenters stated that the rules provide a disadvantage to small businesses. Some commenters stated that the cost of irrigation systems will increase. Some commenters stated that the small business and micro-business assessment contained in the preamble underestimated the impact on small and micro businesses.

The commission responds that San Antonio has adopted many of the requirements that have been adopted in Chapter 344, and has found that the number of illegal and poor installations has decreased and that as a result, business for good installations has increased. In San Antonio the price that "good" irrigators charged did not change significantly but the price of marginal irrigation systems did increase. All businesses that perform irrigation work will have to comply with the adopted rules. The commenters did not provide any additional cost information to support the claims. The commission did not make any changes to the rules as a result of these comments.

IA commented that efficiency should be developed on an individual site basis to keep enforcement practical.

The commission responds that governmental entities that implement landscape irrigation programs may develop criteria for water conservation. Local entities have the authority to enforce rules or ordinances that address excess water usage. Implementing a system on a statewide basis that includes many areas that are not required to implement and enforce landscape irrigation programs would be difficult to enforce. The commission did not make any changes to the rules as a result of this comment.

Some commenters stated that irrigation systems could be turned off without affecting the health of the public because inadequate systems could be turned off.

The commission responds that in many municipalities and water districts, inadequate irrigation systems are not being turned off because turning off the water to the irrigation system also turns off the water to the residence or commercial building. The inclusion of an isolation valve on new irrigation systems will allow owners or government officials to turn off malfunctioning or inadequate irrigation systems. The commission did not make any changes to the rules as a result of this comment.

Some commenters stated that the irrigator could be brought to account for an inadequate installation and civil law can be used to recover damages and/or require changes.

The commission responds that HB 4/SB 3 require the commission to adopt rules that address the design, installation, and operation of irrigation systems; water conservation; and the duties and responsibilities of licensed irrigators. The adopted rules address those requirements. The commission did not make any changes to the rule as a result of these comments.

A commenter stated that the commission should be held accountable that the rules have been thoroughly reviewed and that licensed irrigators will be held accountable for complying with the rules.

The commission responds that the rules have been thoroughly reviewed and are enforceable. Local governmental entities and the state will hold licensed irrigators accountable for following state and local rules or ordinances. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that TCEQ should prepare an example form for the information required in the rules change. A commenter asked that a hypothetical example, or mock contract, be provided to show the contractual requirements in §344.71(c).

The commission responds that TCEQ is planning to update the Landscape Irrigation webpage with a Frequently Asked Questions section for use by irrigators, homeowners, and exempt businesses. A Regulatory Guidance Document is also being planned that would provide example forms and language for use by irrigators. The commission did not make any changes to the rules as a result of these comments.

Several commenters questioned asked how much water would be saved by the rules; specifically, how much will be saved by the as-built plan, the maintenance checklist, seasonally adjusted ET schedule, and the three minute flow test.

The commission responds that an estimated water savings for the as built plan, the maintenance checklist, the seasonally adjusted ET schedule, and the three-minute flow test has not been calculated. The zone flow measurement test has been modified in §344.1(45) as a result of this comment. The requirements relate to operating a more efficient irrigation system, and any savings will be based on the irrigator or irrigation technician providing information to the irrigation system owner or owner's representative during the walk through. The information will explain the irrigation system operation and maintenance and provide details to adjust the controller to reflect the seasonal watering requirements in Texas. Both can lead to more efficient system operation. The as-built plan will allow repairs to be made more quickly, allow the homeowner to replace emission devices or other parts with the same type of component, and thus help insure the integrity of the irrigation system. These items will ultimately operate to conserve water. The commission made changes to §344.1(45) has been changed in response to the comment.

A commenter stated that the rules do not promote water conservation but they would result in a defined, uniform method of irrigation installation in Texas.

The commission responds that overall the rules do promote water conservation. The various design and installation requirements coupled with improved contractual and warranty requirements will encourage irrigation system owners to have repairs made in a more timely fashion. The information

provided to irrigation system owners will help promote efficient irrigation system operation. The commission did not make any changes to the rules as a result of this comment.

Some commenters stated the state was micro managing.

The commission responds that HB 4/SB 3 require the commission to adopt rules that address the design, installation, and operation of irrigation systems, water conservation, and the duties and responsibilities of licensed irrigators. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that some commercial property owners asked to have irrigation systems installed without proper design and backflow devices which does not meet state mandates.

The commission responds that the current rules have requirements for a design and backflow device. The new rules have given more specificity to the requirements of the design and are consistent with the Public Drinking Water rules. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that many of the rules and regulations are restrictions of free trade and commerce as governed by the Uniform Commercial Code.

These rules are based on clearly articulated and expressed state legislative policy to regulate landscape irrigation in the state of Texas. HB 4/SB 3 directed the commission to adopt rules that

govern: 1) the connection of an irrigation system to any water supply; 2) the design, installation, and operation of irrigation systems; 3) water conservation; and 4) the duties and responsibilities of irrigators. HB 1656 adds a new landscape irrigation license classification, irrigation inspector, and directs municipalities with populations of 20,000 or more to adopt ordinances that require irrigation inspectors be licensed by the commission and that irrigators obtain a permit before installing an irrigation system. Municipalities must adopt standards and specifications for designing, installing, and operating irrigation systems and include any rules adopted by the agency that are related to landscape irrigation. As required by HB 4 §19 and SB 3, the commission must adopt standards no later than June 1, 2008, with an effective date of January 1, 2009. The landscape irrigation program is actively monitored and supervised by the state through the TCEQ's Landscape Irrigation program. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that the proposed changes needed more input from irrigators.

The commission responds that there was a significant notice of the proposed rule and a 30-day comment period allows for public comment on rules. The commission published the proposed rules on the agency's web site in December 2007. The proposed rules were published in the *Texas Register* on February 1, 2008. The Texas Turf and Irrigation Association (TTIA) home page published a notice about the proposal. TTIA also sent post cards to all members notifying them of the proposed rules, public hearing date, and comment period. The IA sent an e-mail to all Texas members related to the rules. Austin Lawn and Sprinkler Association sent an e-mail to 59 people informing them of the public hearing on the Chapter 344 rules. A public hearing was held on February 26, 2008. All of

these efforts were directed to encourage input from irrigators and other interested parties. In addition, during a multi-week period two Irrigator Advisory Council members visited over ten cities around the state to obtain local input from local associations and irrigators. A stakeholders meeting was held in Austin on August 10, 2007. Written comments were accepted prior to and after the meeting. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that the rules go on and on and try to keep irrigators busy with paperwork and that the rules should be more user friendly. A commenter stated that the commission continued inept governance over the irrigation industry and that the commission thinks that more rules and oversight is the answer to everything. Another commenter stated that business owners have to multi-task and that should be considered in adopting any rules. Another commenter stated that the rules would waste man hours and create unneeded paperwork and would force some irrigators out of business. A commenter stated that changes should be made so that it would not negatively impact 90% of the contractors. A commenter stated that some of the rules proposed were wrong.

The commission responds that the commenters did not provide information to support the general claims. The commission was directed by HB 4/SB 3 to adopt rules that address the design, installation and operation of irrigation systems, water conservation, and the duties and responsibilities of irrigators. The commission created a new irrigation technician license with expanded responsibilities that will greatly assist the irrigator in complying with these rules. San Antonio implemented a program that includes many of the requirements that have been adopted in Chapter 344. San Antonio found that the number of illegal and poor installations has decreased. The adopted rules balance the needs of the irrigator to multi-task and earn money, with the need to

implement business practices to support water conservation, to provide information that will educate irrigation system owners about the importance of water conservation when using their irrigation system and maintain business records. The commission did not make any changes to the rules as a result of these comments.

A commenter questioned why the Backflow Prevention Assembly Tester (BPAT) licensees were not required to have rubber stamps.

The commission responds that the BPAT requirements were not considered as part of the rulemaking for landscape irrigation. The suggestion was forwarded to the appropriate staff for consideration. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that most of the rules were not new but were already on the books.

The commission agrees. The rules were reorganized, so rules that were already on the books had to be repealed and the existing (reorganized) and new (added) rules proposed for public comment. The adopted rules are a mix of old and new rules. The commission did not make any changes to the rules as a result of this comment.

Some commenters stated that regulations do not conserve water.

The commission responds that no single element of the rule, by itself, accomplishes water conservation, but it is the combination of various elements of the adopted rules that will accomplish

this objective. The emphasis on proper design, installation, application of components, warranties, new irrigation licenses, homeowner education, etc. all contribute toward achieving the goal of HB 4/SB 3 which is ultimately to conserve water for current and future generations. The commission did not make any changes to the rules as a result of this comment.

A commenter stated that IA's 1990 Water Conservation Policy emphasized economic incentives and that SB 3 clearly defines BMPs as voluntary.

The commission responds that several sources of information were considered in the rules including, the IA's BMPs (2005) related to design, pressure regulation, technology, installation and water conservation; IA's consumer information (www.irrigation.org/Rsrcs); and IA's materials used for design training. Ordinances, rules and irrigation system information from Texas, Colorado, California, Minnesota, Oregon and Florida were reviewed. The EPA's WaterSense program was considered. Basic irrigation textbooks used in Texas were consulted. The references to voluntary BMPs in HB 4/SB 3 are not directly related to irrigation, but to the Water Resource Council's duties and responsibilities in reviewing new technology related to water conservation. HB 4/SB 3 directed the commission to adopt rules that irrigation systems be designed, installed, maintained, repaired, and serviced in a manner that would promote water conservation. HB 4/SB 3 also directed the commission to adopt rules related to an irrigator's duties and responsibilities. The commission did not make any changes to the rules as a result of these comments.

A commenter supported the repeal of Chapter 344 in its entirety with replacement of new language but did not provide any proposed changes to Subchapter B, Standard of Conduct and Subchapter H, Irrigator

Advisory Council. A commenter supported retaining, not repealing, Subchapter D (§§344.70 - 344.73, 344.75 and 344.77).

The commission responds that HB 1656 requires municipalities of 20,000 or more to adopt landscape irrigation programs thus the language in §344.70 and §344.71 is no longer applicable. HB 4/SB 3 directed the commission to adopt rules related to water conservation, thus the repeal of §344.72, which only generally addressed water conservation. The adopted rules provide specific requirements to promote water conservation. Section 344.73 addressed backflow prevention methods and §344.75 addressed cross-connections. The adopted rules provide additional and updated information concerning backflow and cross connections. Section 344.77 contained outdated minimum design and installation standards. The adopted rule addresses new technology and standards. The commission did not make changes to the rules based on these comments.

Some commenters stated that irrigation was not as important as plumbing but the irrigator and technician seem to be equated to a Master and Journeyman plumber and that the requirement to be on-site indicates an importance of the irrigator or technician that should not be required since irrigation does not rise to the importance of potable water plumbing.

The commission responds that HB 4, SB 3, and HB 1656 directed the commission to address the standards for the design, installation, and operation of irrigation systems, water conservation, and the duties and responsibilities of irrigators. The adopted rules address standards for design, installation, and operation of irrigation systems and provide more efficient irrigation systems. In addition to water conservation, an irrigation system could subject the water supply to potential

contamination if proper controls are not installed. Since irrigation systems can waste water and there is potential contamination of the public water supply from an irrigation system, it is important to have either a trained and licensed irrigator or irrigation technician on-site at all times. There were no changes to the rules as a result of these comments.

Some commenters stated that builders and large contractors do not always abide by any rules and that builders should be educated. Other commenters stated that the commission should undertake an education effort. Some commenters stated that many people think it is acceptable to hire their lawn maintenance company to repair their sprinkler system. Other commenters stated that site designers and landscape architects should be held responsible for the design of landscape irrigation systems.

The commission responds that upon adoption of the rules, the commission will initiate an education program that will target irrigation system owners, irrigators, home builders, and exempt businesses to stress the importance of following all landscape irrigation program rules. The commission will update the website to include a Frequently Asked Questions section for irrigation system owners, irrigators and exempt businesses. The commission will develop brochures to communicate the importance of landscape irrigation. The commission will inform exempt business organizations of the adopted rules and ask their assistance in informing members that the design, installation and operation standards apply to everyone. The commission did not make any changes to the rules as a result of these comments.

A commenter stated that the rules should set minimum standards not methods, process, or equipment because those rules would be flawed.

The commission responds that the adopted rules set minimum standards for the performance of irrigation activities. The rules were adopted in compliance with HB 4/SB 3. The adopted rules build upon rules that have been in place for a number of years but have been updated to reflect new technology. The commission did not make any changes to the rules as a result of this statement.

IA commented that the increased cost of the irrigation system relate to process and administrative expense with no established metrics to measure the effectiveness of the mandates. IA stated that the citizens of Texas should receive tangible data as a reassurance that the added cost results in increased landscape irrigation efficiency. IA suggested a shift in focus on outcome.

The commission responds that the citizens of Texas will receive an enhanced guarantee of available water resources during their lifetime. If an efficient irrigation system can reduce water consumption by 25% over the 20 year usable lifespan, the system can potentially save over 0.75 million gallons of water. The increased costs are related to the requirement to install an isolation valve and box, a rain/moisture sensor or other technology, a y-type strainer, stickers, providing a maintenance checklist, putting the design on paper and other miscellaneous costs. A shift in focus to outcome measurements would, in fact, increase the cost of the irrigation system to the irrigation system owner since additional measurement equipment (such as a water meter or flow meter) would need to be installed. Governmental entities would be responsible for gathering, analyzing and providing the data to irrigation system owners which would be an additional cost. The commission did not make any changes to the rules as a result of these comments.

SUBCHAPTER A: GENERAL PROVISIONS

§344.1, §344.4

STATUTORY AUTHORITY

These repeals are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. These repeals are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also adopted under Texas Occupations Code (TOC), §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151, concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158, concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, these repeals are also adopted under Texas Health and Safety Code (THSC), §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, and 37.001-37.015; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; THSC, §341.033 and §341.034.

§344.1. Definitions.

§344.4. License Required.

SUBCHAPTER A: DEFINITIONS

§344.1

STATUTORY AUTHORITY

This new section is adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This new section is also adopted under TWC, §§37.001-37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This new section is also adopted under TWC, §49.238, concerning Irrigation Systems. This new section is also adopted under Local Government Code, §401.006, concerning Irrigation Systems. This new section is also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151 concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158 concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. This new section is also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

This adopted new section implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, 37.001 - 37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; THSC, §341.033 and §341.034.

§344.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise.

(1) **Air gap**--A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

(2) **Atmospheric Vacuum Breaker**--An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-siphonage Prevention Assembly.

(3) **Backflow prevention**--The mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

(4) **Backflow prevention assembly**--Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

(5) **Completion of irrigation system installation**--When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

(6) **Consulting**--The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

(7) **Cross-connection**--An actual or potential connection between a potable water source and an irrigation system that may contain contaminants or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

(8) **Design**--The act of determining the various elements of a landscape irrigation system that will include, but not limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

(9) **Design pressure**--The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

(10) **Double Check Valve**--An assembly that is composed of two independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Also known as a Double Check Valve Backflow Prevention Assembly.

(11) **Emission device**--Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

(12) **Employed**--Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

(13) **Head-to-head spacing**--The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

(14) **Health hazard**--A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

(15) **Hydraulics**--The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

(16) **Inspector**--A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.

(17) **Installer**--A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(18) **Irrigation inspector**--A person who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor and is required to be licensed under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(19) **Irrigation plan**--A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

(20) **Irrigation services**--Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

(21) **Irrigation system**--An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.

(22) **Irrigation technician**--A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(23) **Irrigation zone**--A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

(24) **Irrigator**--A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the

connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Chapter 30 of this title.

(25) **Irrigator-in-Charge**--The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

(26) **Landscape irrigation**--The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

(27) **License**--An occupational license that is issued by the commission under Chapter 30 of this title to an individual that authorizes the individual to engage in an activity that is covered by this chapter.

(28) **Mainline**--A pipe within an irrigation system that delivers water from the water source to the individual zone valves.

(29) **Maintenance checklist**--A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation

zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

(30) **Major maintenance, alteration, repair, or service**--Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

(31) **Master valve**--A remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

(32) **Matched precipitation rate**--The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

(33) **New installation**--An irrigation system installed at a location where one did not previously exist .

(34) **Non-health hazard**--A cross-connection or potential cross connection from a landscape irrigation system that involves any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.

(35) **Non-potable water**--Water that is not suitable for human consumption. Non-potable water sources include, but are not limited to, irrigation systems, lakes, ponds, streams, gray water that is discharged from washing machines, dishwashers or other appliances, water vapor condensate from cooling towers, reclaimed water, and harvested rainwater.

(36) **Pass-through contract**--A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.

(37) **Potable water**--Water that is suitable for human consumption.

(38) **Pressure Vacuum Breaker**--An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

(39) **Reclaimed water**--Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

(40) **Records of landscape irrigation activities**--The , irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

(41) **Reduced Pressure Principle Backflow Prevention Assembly**--An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

(42) **Static water pressure**--The pressure of water when it is not moving.

(43) **Supervision**--The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Also a licensed installer working under the direction of a licensed irrigator or beginning January 1, 2009, an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

(44) **Water conservation**--The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

(45) **Zone flow**--A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

(46) **Zone valve**--An automatic valve that controls a single zone of a landscape irrigation system.

**SUBCHAPTER B: GENERAL PROVISIONS AFFECTING
THE IRRIGATOR ADVISORY COUNCIL**

§344.10

STATUTORY AUTHORITY

This repeal is adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This repeal is also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This repeal is also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151, concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158, concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, this repeal is also adopted under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

The adopted repeal implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, and 37.001 - 37.015;

TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159,
and 1903.251; THSC, §341.033 and §341.034.

§344.10. Irrigator Advisory Council.

**SUBCHAPTER B: STANDARDS OF CONDUCT FOR
IRRIGATORS, INSTALLERS, IRRIGATION TECHNICIANS, AND IRRIGATION
INSPECTORS, AND LOCAL REQUIREMENTS**

§§344.20 - 344.24

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also adopted under TWC, §49.238, concerning Irrigation Systems. These new sections are also adopted under Local Government Code, §401.006, concerning Irrigation Systems. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; THSC, §341.033 and §341.034.

§344.20. Purpose of Standards.

(a) The correct practice of irrigation as a science and profession is essential for the protection and conservation of the water resources of the state and should be conducted by individuals who are held to the highest ethical standards. The legislature has vested the commission with the authority and duty to establish and enforce standards of professional conduct and ethics for practitioners in the irrigation industry.

(b) Every applicant for an irrigator, installer, irrigation technician, or irrigation inspector license must become fully informed of the obligations and responsibilities inherent in the practice of irrigation as outlined by these standards of conduct. Each licensed irrigator, installer, irrigation technician, or irrigation inspector is deemed to have notice of these standards of conduct and is required to abide by the standards.

§344.21. Intent.

(a) These standards of conduct are established to prescribe responsibility on the part of an irrigator, an installer, an irrigation technician, an irrigation inspector, and a qualifying exempt business owner to aid in governing the irrigation industry.

(b) The commission will determine what actions constitute violations of the standards in accordance with Chapter 70 of this title (relating to Enforcement) and Texas Water Code, Chapter 7 and institute appropriate disciplinary action, which may lead to monetary penalties or the suspension or revocation of a license in accordance with the applicable state statutes.

§344.22. Proficiency in the Field of Irrigation; Representation of Qualifications.

(a) All irrigators, installers, irrigation technicians, and inspectors shall be knowledgeable of the current industry standards regarding selling, designing, providing consulting services, installing, maintaining, altering, repairing, or servicing irrigation systems, including the connection of such a system to any source of water and water conservation. All irrigators, installers, irrigation technicians, and inspectors shall conform to the current adopted version of these rules and any local rules that do not conflict with these rules, or that are more stringent than these rules, when performing these activities.

(b) All irrigators, installers, irrigation technicians, irrigation inspectors, and exempt business owners shall accurately and truthfully represent to prospective clients their qualifications to perform the services requested and shall not perform services for which they are not qualified by experience, knowledge, or license in the technical field involved.

(c) All irrigators, installers, irrigation technicians, and inspectors shall be knowledgeable of local requirements related to landscape irrigation systems.

§344.23. Irrigation Practice.

False, misleading, or deceptive practices by an irrigator, installer, irrigation technician, or irrigation inspector relating to bidding, advertising, selling, installation, maintenance, alteration, repair, servicing, or inspection of irrigation systems are prohibited.

§344.24. Local Regulation and Inspection.

(a) Where any city, town, county, special purpose district, other political subdivision of the state, or public water supplier requires licensed irrigators, installers, irrigation technicians, or irrigation inspectors to comply with reasonable inspection requirements, ordinances, or regulations designed to protect the public water supply, any of which relates to work performed or to be performed within such political subdivision's territory the licensed irrigator, installer, irrigation technician, or irrigation inspector must comply with such requirements, ordinances, and regulations.

(b) Any city, town, county, other political subdivision of the state, or public water supplier that is not required to adopt rules or ordinances regulating landscape irrigation may adopt a landscape irrigation program by ordinance or rule and may be responsible for inspection of connections to its public water supply system up to and including the backflow prevention device.

(c) Municipalities with a population of 20,000 or more and a water district that chooses to implement a landscape irrigation program must verify that the irrigator that designs and installs an irrigation system holds a valid irrigator's license and has obtained a permit before installing a system within its territorial limits or if a municipality, its extraterritorial jurisdiction. Inspectors must verify that

the design and installation meet the requirements of this chapter and local ordinances or rules that do not conflict with this chapter, or that are more stringent than this chapter.

(d) Each inspector shall maintain a log of all irrigation systems inspected that includes, but is not limited to, the system location, property owner, irrigator responsible for installation, permit status, problems noted during the inspection, and date of the inspection. The log must be kept for three years. The log shall be available for review within two business days of the request by authorized representatives of the commission or any regulatory authority with jurisdiction over landscape irrigation issues in the area the inspector is employed to inspect.

(e) An inspector may not inspect a landscape irrigation system that is an on-site sewage disposal system, as defined by Texas Health and Safety Code, §366.002.

(f) An inspector may not inspect an irrigation system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002; or is connected to a groundwater well that is used by the property owner for domestic use.

**SUBCHAPTER C: REQUIREMENTS FOR LICENSED IRRIGATORS
AND LICENSED INSTALLERS**

§§344.49, 344.58 - 344.63

STATUTORY AUTHORITY

These repeals are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.49. Display of License.

§344.58. Unauthorized Use of License.

§344.59. Seal Required.

§344.60. Seal and Rubber Stamp Facsimile Design.

§344.61. Authorized Use of Seal and Rubber Stamp facsimile.

§344.62. Unauthorized Use of Seal or Rubber Stamp.

§344.63. Required Use of Seal.

**SUBCHAPTER C: REQUIREMENTS FOR LICENSED
IRRIGATORS, INSTALLERS, IRRIGATION TECHNICIANS, AND IRRIGATION
INSPECTORS
§§344.30 - 344.38**

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also adopted under TWC, 49.238, concerning Irrigation Systems. These new sections are also adopted under Local Government Code, §401.006, concerning Irrigation Systems. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.30. License Required.

(a) An irrigator is an individual who:

(1) sells, designs, provides consultation services, installs, maintains, alters, repairs, or services an irrigation system, including the connection of such system to any water supply;

(2) advertises or represents to anyone that the individual can perform any or all of these functions; and

(3) is required to hold a valid irrigator license issued under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(b) Through December 31, 2009, an installer is an individual who connects an irrigation system to any water supply.

(c) Beginning January 1, 2009, an irrigation technician is an individual who:

(1) connects an irrigation system to a water supply;

(2) under the supervision of a licensed irrigator, installs, maintains, alters, repairs, or services a landscape irrigation system;

(3) represents to anyone that the individual can perform any or all of these functions; and

(4) is required to hold a valid irrigation technician license issued under Chapter 30 of this title.

(d) All irrigators, installers, and irrigation technicians shall comply with the rules contained in this chapter when performing any or all of the functions listed in this section.

(e) An individual who inspects irrigation systems and enforces a municipality's landscape irrigation ordinance must:

(1) hold a valid irrigation inspector license issued according to Chapter 30 of this title; or

(2) hold a valid plumbing inspector license.

(f) An individual who inspects irrigation systems and enforces a water district's rules related to landscape irrigation systems must:

(1) hold a valid irrigation inspector license issued according to Chapter 30 of this title;

(2) hold a valid plumbing inspector license;

(3) be the district's operator; or

(4) be another regulatory authority with jurisdiction over landscape irrigation.

(g) An inspector shall comply with the rules contained in this chapter when performing any or all of the functions listed in this section.

(h) A property owner is not required to be licensed in accordance with Texas Occupations Code, Title 12, §1903.002(c)(1) if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. A home or property owner who installs an irrigation system must meet the standards contained in §344.62(b) Spacing, §344.62(c) Water pressure, §344.62(g) related to spraying water over impervious materials, §344.62(j) Rain or moisture shut-off devices or other technology, and §344.62(k) Isolation valve. Municipalities or water districts may adopt more stringent requirements for a home or property owner who installs an irrigation system.

§344.31. Exemption for Business Owner Who Provides Irrigation Services.

Under Chapter 30 of this title (relating to Occupational Licenses and Registrations), a business owner who employs a licensed irrigator as an irrigator-in-charge to provide consulting services or to supervise or conduct the exempt business's operations relating to the design, installation, maintenance,

alteration, repairing, and servicing of irrigation systems is exempt from the licensing requirements of Texas Occupations Code, Chapter 1903.

§344.32. Responsibilities of a Business Owner Who Provides Irrigation Services.

An exempt owner who provides landscape irrigation services shall ensure that all irrigation services are supervised by a licensed irrigator, according to the requirements of this subchapter. An exempt business owner who engages in landscape irrigation is responsible for verifying the validity of the license belonging to all irrigators, installers, and irrigation technicians performing irrigation services for the business. An exempt business owner who engages in landscape irrigation is responsible for designating an irrigator-in-charge.

§344.33. Display of License.

(a) Irrigators, installers, and irrigation technicians shall prominently display their license certificate at the place of irrigation business or employment and shall present their license upon request by any regulatory authority, irrigation system's owner, or prospective owner.

(b) Irrigation inspectors shall present their license, when requested by any entity that is regulated under this chapter, and when that request is made while an irrigation inspector is conducting business.

§344.34. Use of License.

(a) No one other than the irrigator, installer, irrigation technician, or irrigation inspector to whom a license is issued shall use or attempt to use the license, which includes the license number.

(b) An individual who uses or attempts to use the license or license number of someone else who is a licensed irrigator, licensed installer, licensed irrigation technician, or licensed irrigation inspector is in violation of Texas Occupations Code, Chapter 1903, and this chapter.

(c) An irrigator's license or license number may be used at only one entity as the irrigator-in-charge. An irrigator may work for other entities, but not as the irrigator-in-charge.

(d) It is a violation of this chapter for an irrigator, installer, irrigation technician or irrigation inspector to authorize or allow another person or entity to use the irrigator's, installer's, irrigation technician's, or irrigation inspector's license or license number in a manner inconsistent with this chapter.

§344.35. Duties and Responsibilities of Irrigators.

(a) An irrigator shall comply with the rules contained in this chapter when performing any or all of the functions described in this section.

(b) An irrigator who performs work for an entity or for an exempt business owner who performs or offers to perform irrigation services shall be knowledgeable of and responsible for all permits, contracts, agreements, advertising, and other irrigation services secured and performed using the irrigator's license.

(c) A licensed irrigator who is employed by an exempt business owner as defined by §344.31 of this title (relating to Exemption for Business Owner Who Provides Irrigation Services) shall supervise all irrigation services of the business, in accordance with this chapter.

(d) A licensed irrigator is responsible for:

- (1) using the stamp or rubber seal in accordance with this chapter;
- (2) obtaining all permits and inspections required to install an irrigation system;
- (3) complying with local regulations;
- (4) determining the appropriate backflow prevention method for each irrigation system installation and installing the backflow prevention device correctly;
- (5) maintaining landscape irrigation systems records;
- (6) conserving water;
- (7) developing and following irrigation plan for each new irrigation system;
- (8) designing an irrigation system that complies with the requirements of this chapter;

(9) providing on-site supervision of the installation of an irrigation system beginning January 1, 2010;

(10) providing supervision to an irrigation technician while connecting an irrigation system to a water supply; installing, maintaining, altering, repairing, or servicing an irrigation system;

(11) providing supervision to an installer connecting an irrigation system through December 31, 2009;

(12) completing the irrigation system including the final "walk through," completing the maintenance checklist , placing a permanent sticker on the controller or on the maintenance checklist if the irrigation system does not have an automatic controller, and providing a copy of the design plan;

(13) selling, consulting, performing maintenance, alteration, repair, and service of irrigation systems that complies with the requirements of this chapter;

(14) providing advertisements, contracts, and warranties that comply with the requirements of this chapter; and

(15) installing an irrigation system that complies with the requirements of this chapter.

§344.36. Duties and Responsibilities of Installers and Irrigation Technicians.

(a) A licensed installer may connect an irrigation system to a water supply through December 31, 2009. This includes installing an approved backflow prevention method pursuant to §344.50 of this title (relating to Backflow Prevention Methods) when connecting an irrigation system to a potable water supply. Beginning January 1, 2009, a licensed irrigation technician may connect an irrigation system to a water supply, including installing an approved backflow prevention method pursuant to §344.50 of this title and may maintain, alter, repair, service, or direct the installation of irrigation systems under the supervision of an irrigator.

(b) If an installer or irrigation technician connects an irrigation system to a potable water supply, the connection and installation of the backflow prevention method must be as indicated on the site irrigation plan or as directed by the licensed irrigator and documented on the site irrigation plan.

(c) Through December 31, 2009, an installer is responsible for the connection of an irrigation system to a water supply under the supervision of a licensed irrigator.

(d) Beginning January 1, 2009, an irrigation technician, under the supervision of a licensed irrigator, is responsible for:

(1) connecting an irrigation system to a water supply; and

(2) providing on-site supervision of the installation, maintenance, alteration, repair, service of an irrigation system including the final walk through with the irrigation system owner or owner's representative to explain the maintenance and operation of the irrigation system.

§344.37. Duties and Responsibilities of Irrigation Inspectors.

(a) A licensed irrigation inspector shall enforce the applicable irrigation rules or ordinance of the employing governmental entity.

(b) A licensed irrigation inspector, licensed plumbing inspector, a water district's operator or other governmental entity shall be responsible for:

(1) verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;

(2) inspecting the irrigation system;

(3) determining that the irrigation system complies with the requirements of this chapter;

(4) determining that the appropriate backflow prevention device was installed, tested, and test results provided to the water purveyor;

(5) investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and

(6) maintaining records according to this chapter.

§344.38. Irrigator, Installer, and Irrigation Technician Records.

Upon the licensed irrigator obtaining the seal or rubber stamp, in accordance with this chapter, an impression of the seal or rubber stamp will be made on letterhead, or other business stationary, and maintained on file for review by the commission. Archival copies of all records given to the irrigation system's owner or owner's representative shall be maintained by the irrigator. Records will be maintained by the irrigator for a period of three years from the date installation, maintenance, alteration, repair or service was completed. Irrigators, installers, and irrigation technicians shall make all records of landscape irrigation services available within ten business days of any request made by authorized representatives of the commission or the local regulatory authority with jurisdiction over landscape irrigation issues.

SUBCHAPTER D: STANDARDS FOR LANDSCAPE IRRIGATION

§§344.70 - 344.73, 344.75, 344.77

STATUTORY AUTHORITY

These repeals are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.70. Local Regulation.

§344.71. Local Inspection.

§344.72. Water Conservation.

§344.73. Backflow Prevention Methods.

§344.75. Specific Conditions and Backflow Prevention Devices.

§344.77. Minimum Standards for Design and Installation of Irrigation Systems.

SUBCHAPTER D: LICENSED IRRIGATOR SEAL

§§344.40 - 344.43

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.40. Seal Required.

Each irrigator, upon being licensed with the commission, shall obtain a seal, as described in §344.41 of this title (relating to Seal Design). Licensed irrigators shall not engage in any landscape irrigation services without physical possession of the seal and the license. The irrigator is responsible for the security of the seal.

§344.41. Seal Design.

(a) The required seal must be:

(1) circular; and

(2) not less than 1-1/2 inches in diameter.

(b) The required seal must display:

(1) the words "State of Texas" at the top between the knurled circles;

(2) the words "Licensed Irrigator" at the bottom; and

(3) the irrigator's name and license number, excluding leading zeros, horizontally in the circular field.

§344.42. Seal Display.

(a) On every document requiring an irrigator's seal, the seal shall be clearly visible and legible on the original document and all copies or reproductions of the original document.

(b) An irrigator may use an electronic or other format seal and signature if the seal, signature, and date are clearly visible and legible on the original document and all copies or reproductions of the original document.

§344.43. Seal Use.

(a) Irrigators shall:

(1) sign their legal name;

(2) affix the seal above the irrigator's signature; and

(3) include the date of signing (month, day, and year) of each document to which the seal is affixed.

(b) The presence of the irrigator's seal displayed above the irrigator's signature and date on any document constitutes the acceptance of all professional responsibility for the document and the irrigation services performed in accordance with that document .

(c) The irrigator will maintain, for three years, a copy of each document bearing the irrigator's seal.

(d) Once a document containing a seal is issued, the seal may not be altered.

(e) Irrigators shall not use or authorize the use of a seal on any plan or specification created by another irrigator unless the irrigator:

(1) Reviews and makes changes to adapt the plan or specification to the specific site conditions and to address state and local requirements; and

(2) Accepts full responsibility for any alterations to the plan or specification and any downstream consequences.

(f) If an irrigator prepares a portion of a plan or specification, that portion of the design or specification prepared by the irrigator, or under the irrigator's supervision and seal, should be clearly identified.

(g) Irrigators shall sign, seal and date the irrigation plan and specifications, contract, addenda or change orders, warranty, and the maintenance checklist.

**SUBCHAPTER F: STANDARDS OF CONDUCT FOR LICENSED
IRRIGATORS AND INSTALLERS**

§§344.90 - 344.96

STATUTORY AUTHORITY

These repeals are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.90. Purpose of Standards.

§344.91. Intent.

§344.92. Proficiency in Field of Irrigation; Representation of Qualifications.

§344.93. Advertisement.

§344.94. Contracts.

§344.95. Design.

§344.96. Warranties.

SUBCHAPTER E: BACKFLOW PREVENTION AND CROSS CONNECTIONS

§§344.50 - 344.52

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001-37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively.

These new sections are also adopted under TWC, §49.238, concerning Irrigation Systems. These new sections are also adopted under Local Government Code, §401.006, concerning Irrigation Systems. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001-37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.50. Backflow Prevention Methods.

(a) Any irrigation system that is connected to a public or private potable water supply must be connected through a commission-approved backflow prevention method. The backflow prevention device must be approved by the American Society of Sanitary Engineers; or the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California; or the Uniform Plumbing Code; or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

(b) If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow;

(1) An air gap may be used if:

(A) there is an unobstructed physical separation; and

(B) the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

(2) Reduced pressure principle backflow prevention assemblies may be used if:

(A) the device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

(B) drainage is provided for any water that may be discharged through the assembly relief valve.

(3) Pressure vacuum breakers may be used if:

(A) no back-pressure condition will occur; and

(B) the device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

(4) Atmospheric vacuum breakers may be used if:

(A) no back-pressure will be present;

(B) there are no shutoff valves downstream from the atmospheric vacuum breaker;

(C) the device is installed at a minimum of six inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler;

(D) there is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and

(E) a separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.

(c) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

(d) If there are no conditions that present a health hazard double check valve backflow prevention assemblies may be used to prevent backflow if the device is tested upon installation and:

(1) a local regulatory authority does not prohibit the use of a double check valve;

(2) backpressure caused by an elevation of pressure in the discharge piping by pump or elevation of piping above the supply pressure which could cause a reversal of the normal flow of water or back-siphonage conditions caused by a reduced or negative pressure in the irrigation system exist; and

(3) test cocks are used for testing only.

(e) If a double check valve is installed below ground:

(1) test cocks must be plugged, except when the double check valve is being tested;

(2) test cock plugs must be threaded, water-tight, and made of non-ferrous material;

(3) a y-type strainer is installed on the inlet side of the double check valve;

(4) there must be a clearance between any fill material and the bottom of the double check valve to allow space for testing and repair; and

(5) there must be space on the side of the double check valve to test and repair the double check valve.

§344.51. Specific Conditions and Cross-Connection Control.

(a) Before any chemical is added to an irrigation system connected to any potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

(b) Connection of more than one water source to an irrigation system presents the potential for contamination of the potable water supply if backflow occurs. Therefore, connection of any additional

water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

(c) Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

(d) If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Chapter 285 of this title (relating to On-Site Sewage Facilities), then:

(1) all irrigation piping and valves must meet the separation distances from the On-Site Sewage Facilities system as required for a private water line in §285.91(10) of this title (relating to Minimum Required Separation Distances for On-Site Sewage Facilities);

(2) any connections using a private or public potable water source must be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in §344.50 of this title (relating to Backflow Prevention Methods); and

(3) any water from the irrigation system that is applied to the surface of the area utilized by the On-Site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-Site Sewage Facilities system from operating effectively.

§344.52. Installation of Backflow Prevention Device.

(a) If an irrigation system is connected to a potable water supply and requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method as defined in this title before any major maintenance, alteration, repair, or service is performed.

(b) If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

(c) The irrigator shall ensure the backflow prevention device is tested prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.

**SUBCHAPTER F: STANDARDS FOR DESIGNING, INSTALLING, AND MAINTAINING
LANDSCAPE IRRIGATION SYSTEMS**

§§344.60 - 344.65

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively.

These new sections are also adopted under TWC, §49.238, concerning Irrigation Systems. These new sections are also adopted under Local Government Code, §401.006, concerning Irrigation Systems. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.60. Water Conservation.

All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in §344.1(44) of this title (relating to Definitions).

§344.61. Minimum Standards for the Design of the Irrigation Plan.

(a) An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

- (1) diminish the operational integrity of the irrigation system;
- (2) violate any requirements of this chapter; and
- (3) go unnoted in red on the irrigation plan.

(b) The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

(c) All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

(1) the irrigator's seal, signature, and date of signing;

(2) all major physical features and the boundaries of the areas to be watered;

(3) a North arrow;

(4) a legend;

(5) the zone flow measurement for each zone;

(6) location and type of each:

(A) controller;

(B) sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);

(7) location, type, and size of each:

(A) water source, such as, but not limited to a water meter and point(s) of connection;

(B) backflow prevention device;

(C) water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;

(D) valve, including, but not limited to, zone valves, master valves, and isolation valves;

(E) pressure regulation component; and

(F) main line and lateral piping. (8) the scale used; and

(9) the design pressure.

§344.62. Minimum Design and Installation Requirements.

(a) No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

(b) Spacing.

(1) The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.

(2) New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.

(3) Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

(c) Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

(d) Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.

(e) Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

(f) Matched precipitation rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

(g) Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

(h) Master valve. When provided , a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

(i) PVC pipe primer solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605).

(j) Rain or moisture shut-off devices or other technology. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. Rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other

technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, Terrell, Loving, Winkler, Ward, Reeves, Ector, Crane and Pecos are excluded from this requirement.

(k) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

(l) Depth coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.

(1) If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

(2) If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.

(3) All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

(m) Wiring irrigation systems.

(1) Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

(2) Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.

(3) Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.

(4) Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

(n) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non-

potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

(o) Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not on-site, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

§344.63. Completion of Irrigation System Installation.

Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

(1) a final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system;

(2) The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance

checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:

(A) the manufacturer's manual for the automatic controller, if the system is automatic;

(B) a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

(C) a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and

(D) the statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."

(3) A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be

affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink and include:

(4) The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

§344.64. Maintenance, Alteration, Repair, or Service of Irrigation Systems.

(a) The irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair, or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system.

(b) All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill.

(c) Colored PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605).

(d) When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve shall be installed, if an isolation valve is not present.

§344.65. Reclaimed Water.

Reclaimed water may be utilized in landscape irrigation systems if:

- (1) there is no direct contact with edible crops, unless the crop is pasteurized before consumption;
- (2) the irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;
- (3) the irrigation system is installed using purple components;
- (4) the domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with §290.47(i) of this title (relating to Appendices);
- (5) a minimum of an eight inch by eight inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER – DO NOT DRINK" and "AGUA DE RECUPERACIÓN – NO BEBER"; and
- (6) backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the water purveyor.

SUBCHAPTER G: ADVERTISING, CONTRACT, AND WARRANTY

§§344.70 - 344.72

STATUTORY AUTHORITY

These new sections are adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively.

These new sections are also adopted under TWC, §49.238, concerning Irrigation Systems. This new section is also adopted under Local Government Code, §401.006, concerning Irrigation Systems. These new sections are also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These adopted new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001-37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

§344.70. Advertisement.

(a) All vehicles used in the performance of irrigation installation, maintenance, alteration, repair, or service must display the irrigator's license number in the form of "LI_____" in a contrasting color of block letters at least two inches high, on both sides of the vehicle .

(b) All forms of written and electronic advertisements for irrigation services must display the irrigator's license number in the form of "LI_____." Any form of advertisement, including business cards, and estimates which displays an entity's or individual's name other than that of the licensed irrigator must also display the name of the licensed irrigator and the licensed irrigator's license number. Trailers that advertise irrigation services must display the irrigator's license number.

(c) The name, mailing address, and telephone number of the commission must be prominently displayed on a legible sign and displayed in plain view for the purpose of addressing complaints at the permanent structure where irrigation business is primarily conducted and irrigation records are kept.

§344.71. Contracts.

(a) All contracts to install an irrigation system must be in writing and signed by each party and must specify the irrigator's name, license number, business address, current business telephone numbers, the date that each party signed the agreement, the total agreed price, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178,

P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us." All contracts must include the irrigator's seal, signature, and date.

(b) All written estimates, proposals, bids, and invoices relating to the installation or repair of an irrigation system(s) must include the irrigator's name, license number, business address, current business telephone number(s), and the statement: "Irrigation in Texas is regulated by the Texas Commission On Environmental Quality (TCEQ) (MC-178), P. O. Box 13087, Austin, Texas 78711-3087. TCEQ's web site is: www.tceq.state.tx.us."

(c) An individual who agrees by contract to provide irrigation services as defined in §344.30 of this title (relating to License Required) shall hold an irrigator license issued under Chapter 30 of this title (relating to Occupational Licenses and Registrations) unless the contract is a pass-through contract as defined in §344.1(36) of this title (relating to Definitions). If a pass-through contract includes irrigation services, then the irrigation portion of the contract can only be performed by a licensed irrigator. If an irrigator installs a system pursuant to a pass-through contract, the irrigator shall still be responsible for providing the irrigation system's owner or through contract, the irrigator shall still be responsible for providing the irrigation system's owner or owner's representative a copy of the warranty and all other documents required under this chapter. A pass-through contract must identify by name and license number the irrigator that will perform the work and must provide a mechanism for contacting the irrigator for irrigation system warranty work.

(d) The contract must include the dates that the warranty is valid.

§344.72. Warranties.

(a) On all installations of new irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative with a written warranty covering materials and labor furnished in the new installation of the irrigation system. The irrigator shall be responsible for adhering to terms of the warranty. If the irrigator's warranty is less than the manufacturer's warranty for the system components, then the irrigator shall provide the irrigation system's owner or the owner's representative with applicable information regarding the manufacturer's warranty period. The warranty must include the irrigator's seal, signature, and date. If the warranty is part of an irrigator's contract, a separate warranty document is not required.

(b) An irrigator's written warranty on new irrigation systems must specify the irrigator's name, , business address, and business telephone number(s), must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must include the statement:
"Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 130897, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us."

(c) On all maintenance, alterations, repairs, or service to existing irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative a written document that identifies the materials furnished in the maintenance, alteration, repair, or service. . If a warranty is provided, the irrigator shall abide by the terms . The warranty document must include the irrigator's name, , and business contact information.

SUBCHAPTER H: IRRIGATOR ADVISORY COUNCIL

§344.80

STATUTORY AUTHORITY

This new section is adopted under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This new section is also adopted under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This new section is also adopted under TWC, §49.238, concerning Irrigation Systems. This new section is also adopted under Local Government Code, §401.006, concerning Irrigation Systems. This new section is also adopted under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151 concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158 concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, this new section is also adopted under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

This adopted new section implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, 37.001 - 37.015, and 49.238; Local Government Code, §401.006; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; and THSC, §341.033 and §341.034.

§344.80. Irrigator Advisory Council.

(a) The Irrigator Advisory Council is composed of nine members that are appointed by the commission. Appointments to the council will be made without regard to race, creed, sex, religion, or national origin of the appointees. The purpose of the council is to give the commission the benefit of the members' collective business, environmental, and technical expertise and experience with respect to matters relating to landscape irrigation. The council has no executive or administrative powers or duties with respect to the operation of the commission, and all such powers and duties rest solely with the commission.

(b) Six members of the council must be licensed irrigators who are residents of the State of Texas, experienced in the irrigation business, and familiar with irrigation methods and techniques.

(c) Three members must be representatives of the public. A person is not eligible for appointment as a public member if the person or the person's spouse:

(1) is licensed by an occupational regulatory agency in the field of irrigation; or

(2) is employed by, participates in the management of, or has, other than as a consumer, a financial interest in a business entity or other organization related to the field of irrigation.

(d) It is grounds for removal from the council by the commission if a member:

(1) does not meet, at the time of the appointment, the qualifications that are required by subsection (b) or (c) of this section for appointment to the council;

(2) does not maintain, during service on the council, the qualifications that are required by subsection (b) or (c) of this section for appointment to the council; or

(3) misses three consecutive regularly scheduled meetings or more than half of all the regularly scheduled meetings in a one-year period.

(e) The members of the council serve six-year terms, with the terms expiring February 1 of each odd-numbered year.

(f) A member of the council is entitled to per diem as appropriated by the Texas Legislature for each day that the member engages in the business of the council. A member is entitled to reimbursement

for travel expenses, including expenses for meals and lodging, as provided for in the General Appropriations Act.

(g) The council shall hold meetings at the call of the commission or chairman.

(h) A majority of the council constitutes a quorum for conducting business.

(i) The council will elect a chairman by a majority vote.

Date: 11/02/2010

Contact: Andrea Gardner, City Manager,
City Manager

Information

SUBJECT

Public hearing and action on an ordinance amending the 2009-10 fiscal year budget for the City of Copperas Cove. **Andrea M. Gardner, City Manager**

BACKGROUND/HISTORY

The 2009-10 budget was adopted on September 15, 2009 with budget amendments approved on October 13, 2009, November 3, 2009, March 2, 2010, June 15, 2010 and September 21, 2010. According to Section 6.16(b)(1) of the Copperas Cove City Charter, in order for the City Council to amend the 2009-10 budget it must first hold a public hearing on the proposed amendments. The Charter also provides a requirement that when fund balance is not to be used that only one public hearing be held. The proposed budget amendment will not require the use of fund balance. Thus, one public hearing will be required.

FINDINGS/CURRENT ACTIVITY

The General Fund requires a redistribution of \$14,050 from the Police Department to Fleet Maintenance to cover unbudgeted benefits payouts to employees that retired in fiscal year 2010. A transfer of \$835 from the General Fund is required to cover interest on the 2008 Limited Tax Note in the Golf Course Fund.

The City-Wide Donations Fund will require an increase in expenditure appropriations in the amount of \$12,230. Four thousand two hundred thirty dollars (\$4,230) in appropriations is being donated by numerous entities in the City of Copperas Cove. The funds were used to help fund the 2010 National Night Out. One thousand dollars (\$1,000) in appropriations is being funded by a Pu Mi Cha Brubaker donation toward City Employees' activities. Seven thousand dollars (\$7,000) in appropriations is being donated to the Golf Course by a citizen.

The Grants Fund will require an increase in expenditure appropriations in the amount of \$172,114. The increase in appropriations is being funded by various grant revenues as follows.

Emergency Management Program Revenue	\$7,500
Emergency Mgmt Expenditure Appropriations	\$7,500
Homeland Security Grant Revenue	\$11,172
Fire Grant Fund Expense Appropriations	\$11,172
Lone Star Library Grant Revenue	\$4,765
Library Grant Fund Expense Appropriations	\$4,765
JAG Grant Revenue	\$80,177
Police (JAG) Grant Fund Expense Appropriations	\$80,177
CTCOG Grant Revenue	\$18,500
Police Grant Fund Expense Appropriations	\$18,500

The 2009 Limited Tax Notes (Water & Sewer) will require a redistribution of \$34,984 from the Long Mountain Tank Rehab project to cover additional funds required for completion of the West Clarifier Retrofit.

Interest revenue budgets and the offsetting increase in expenditure appropriations for the 2010 General Obligations and 2010 Limited Tax Notes are as follows.

2010 General Obligation – Water & Sewer

Interest Revenue	\$8,000
NE Sewer Line (Eastside Infrastructure)	\$4,854
NE Water Line (Eastside Infrastructure)	\$3,146

2010 General Obligation – Tax Supported

Interest Revenue	\$2,000
North East Bypass Project	\$2,000

2010 Limited Tax Notes – Tax Supported

Interest Revenue	\$400
Bradford Drive Road Extension	\$400

For Water and Sewer 2010 Limited Tax Notes, in addition to setting up an \$8,500 interest revenue budget, funds are being redistributed from the North Loop Waterline project to other projects.

Interest Revenue	\$8,500
Turkey Run Pump Station	(\$55,000)
North Loop Waterline	(\$3,340,711)
Water/Wastewater Rate Study	\$40,000
Fleet	\$26,300
Weir Gate (Facilities)	\$26,450
Northeast Waterline	\$1,123,231
Mountaintop Water	\$1,686,000
2012 CDBG Match	\$55,000
Water Model Update	\$15,000
Software (Tyler Content Manager)	\$7,230
Avenue F Reconstruction	\$425,000

ACTION OPTIONS/RECOMMENDATION

City staff recommends that the City Council hold a public hearing, then take action on Ordinance No. 2010-49 amending the fiscal year 2009-10 Budget.

Attachments

Link: [Budget Ordinance](#)

Link: [CIP Summaries](#)

Link: [Public Notice](#)

ORDINANCE NO. 2010-49

AN ORDINANCE APPROVING AND ADOPTING AN AMENDMENT TO THE BUDGET FOR OPERATING THE MUNICIPAL GOVERNMENT OF THE CITY OF COPPERAS COVE FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2009, AND ENDING ON SEPTEMBER 30, 2010; REPEALING ALL ORDINANCES AND APPROPRIATIONS IN CONFLICT WITH THE PROVISIONS OF THIS ORDINANCE; AND ESTABLISHING A SAVINGS CLAUSE AND AN EFFECTIVE DATE.

WHEREAS, the City Council desires to amend the operating budget of the municipal government of the City of Copperas Cove for the fiscal year October 1, 2009 to September 30, 2010; and

WHEREAS, said budget amendments have been submitted to the City Council by the City Manager in accordance with the City Charter; and

WHEREAS, public notices of public hearings upon this budget have been duly and legally made as required by City Charter and law.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF COPPERAS COVE:

SECTION I.

That the City Council of the City of Copperas Cove ratify, approve and adopt the amendments to the budget considered for the fiscal year of October 1, 2009 to September 30, 2010, as identified in "Attachment A" of this ordinance.

SECTION II.

That all ordinances for which provision has heretofore been made are hereby expressly repealed if in conflict with the provisions of this ordinance.

SECTION III.

That should any part, portion, or section of this ordinance be declared invalid or inoperative or void for any reason by a court of competent jurisdiction, such decision, opinion or judgment shall in no way affect the remaining portions, parts, or sections or parts of section of this ordinance, which provisions shall be, remain and continue to be in full force and effect.

SECTION IV.

That this ordinance shall take effect and be in full force and effect from and after its passage and publication according to law.

PASSED, APPROVED AND ADOPTED this 2nd day of November 2010, at a regular called meeting of the City Council of the City of Copperas Cove, Texas, which meeting was held in compliance with the Open Meetings Act, *Tex. Gov't Code* 551.001, et.seq., at which meeting a quorum was present and voting.

John Hull, Mayor

ATTEST:

Jane Lees, City Secretary

APPROVED AS TO FORM:

Denton, Navarro, Rocha
& Bernal, P.C., City Attorney

City of Copperas Cove, Texas
2009 Limited Tax Notes
Water & Sewer

Account	Description	Total Project Budget	As of 9/30/2010	Total Amended Project Budget
Beginning Fund Balance				
67-300-0001	Fund Balance	\$ -	\$ -	\$ -
Revenues				
67-390-1001	Bond Proceeds	\$ 930,000	\$ 930,000	\$ 930,000
67-370-6001	Interest Revenue	3,000	900	3,000
Total Revenues		\$ 933,000	\$ 930,900	\$ 933,000
Expenditures*				
67-4615-8500-8300	Vac-Con Truck	\$ 244,326	\$ 244,326	\$ 244,326
67-4615-8500-9048	9th, 11th, 13th, 15th Street Water	24,500	-	24,500
67-4615-8500-9049	West Clarifier Retrofit	465,016	500,000	500,000
67-4615-8500-9050	Long Mountain Tank Rehabilitation	181,674	-	146,690
67-4615-8500-9500	Bond Issuance Costs	17,484	13,914	17,484
Total Expenditures		\$ 933,000	\$ 758,240	\$ 933,000
Ending Fund Balance				
67-300-0001	Fund Balance	\$ -	\$ 172,660	\$ -

* Prior year expenditures have been reconciled to the fund cash balance.

City of Copperas Cove, Texas
2010 General Obligation
Water & Sewer

Account	Description	Total Project Budget	As of 9/30/2010	Total Amended Project Budget
Beginning Fund Balance				
86-300-0001	Fund Balance	\$ -	\$ -	\$ -
Revenues				
86-390-1001	Bond Proceeds	\$ 3,260,000	\$ 3,260,000	\$ 3,260,000
86-370-6001	Interest Revenue	-	1,762	8,000
86-360-5002	Trnsfer fr Fund 02 - Reimb. Resolution	300,000	300,000	300,000
Total Revenues		\$ 3,560,000	\$ 3,561,762	\$ 3,568,000
Expenditures*				
86-4615-8500-9186	NE Sewer Line (Eastside Infrastructure)	\$ 1,952,324	\$ 618,849	\$ 1,957,178
86-4615-8500-xxxx	NE Water Line (Eastside Infrastructure)	1,265,102	-	1,268,248
86-4615-8500-xxxx	Transfer out to Fund 02	300,000	300,000	300,000
86-4615-8500-9500	Bond Issuance Costs	42,574	42,574	42,574
Total Expenditures		\$ 3,560,000	\$ 961,423	\$ 3,568,000
Ending Fund Balance				
86-300-0001	Fund Balance	\$ -	\$ 2,600,339	\$ -

* Prior year expenditures have been reconciled to the fund cash balance.

City of Copperas Cove, Texas
2010 General Obligation
Tax Supported

Account	Description	Total Project Budget	As of 9/30/2010	Total Amended Project Budget
Beginning Fund Balance				
87-300-0001	Fund Balance	\$ -	\$ -	\$ -
Revenues				
87-390-1001	Bond Proceeds	\$ 1,425,000	\$ 1,425,000	\$ 1,425,000
87-370-6001	Interest Revenue	-	438	2,000
Total Revenues		\$ 1,425,000	\$ 1,425,438	\$ 1,427,000
Expenditures*				
87-4190-7500-9030	North East Bypass Project	\$ 1,411,074	\$ 1,140,265	\$ 1,413,074
87-4190-7500-9500	Bond Issuance Costs	13,926	13,926	13,926
Total Expenditures		\$ 1,425,000	\$ 1,154,191	\$ 1,427,000
Ending Fund Balance				
87-300-0001	Fund Balance	\$ -	\$ 271,247	\$ -

* Prior year expenditures have been reconciled to the fund cash balance.

City of Copperas Cove, Texas
2010 Limited Tax Notes
Water & Sewer

Account	Description	Total Project Budget	As of 9/30/2010	Total Amended Project Budget
Beginning Fund Balance				
88-300-0001	Fund Balance	\$ -	\$ -	\$ -
Revenues				
88-390-1001	Bond Proceeds	\$ 3,885,000	\$ 3,885,000	\$ 3,885,000
88-370-6001	Interest Revenue	-	2,172	8,500
Total Revenues		\$ 3,885,000	\$ 3,887,172	\$ 3,893,500
Expenditures*				
88-4616-8500-9034	Turkey Run Pump Station	\$ 105,000	\$ 49,004	\$ 50,000
88-4616-8500-9035	North Loop Waterline	3,682,120	339,500	341,409
88-4616-8500-xxxx	Water/Wastewater Rate Study	-	-	40,000
88-4616-8500-xxxx	Fleet	-	-	26,300
88-4616-8500-xxxx	Weir Gate (Facilities)	-	-	26,450
88-4616-8500-xxxx	NE Waterline	-	-	1,123,231
88-4616-8500-xxxx	Mountaintop Water	-	-	1,686,000
88-4616-8500-xxxx	2012 CDBG Match	-	-	55,000
88-4616-8500-xxxx	Water Model Update	-	-	15,000
88-4616-8500-xxxx	Software (Tyler Content Manager)	-	-	7,230
88-4616-8500-xxxx	Trnsfr to Fd 89 (Avenue F Reconstruction)	-	-	425,000
88-4616-8500-9500	Bond Issuance Costs	97,880	44,442	97,880
Total Expenditures		\$ 3,885,000	\$ 432,946	\$ 3,893,500
Ending Fund Balance				
88-300-0001	Fund Balance	\$ -	\$ 3,454,227	\$ -

* Prior year expenditures have been reconciled to the fund cash balance.

City of Copperas Cove, Texas
2010 Limited Tax Notes
Tax Supported

Account	Description	Total Project Budget	As of 9/30/2010	Total Amended Project Budget
Beginning Fund Balance				
89-300-0001	Fund Balance	\$ -	\$ -	\$ -
Revenues				
89-390-1001	Bond Proceeds	\$ 165,000	\$ 165,000	\$ 165,000
89-360-5002	Trnsfr fr Fd 88 (North Loop Waterline)	-	-	425,000
89-370-6001	Interest Revenue	-	95	400
Total Revenues		<u>\$ 165,000</u>	<u>\$ 165,095</u>	<u>\$ 590,400</u>
Expenditures*				
89-4190-7500-9046	Bradford Drive Road Extension	\$ 162,942	\$ -	\$ 163,342
89-4190-7500-xxxx	Avenue F Reconstruction	\$ -	\$ -	\$ 425,000
89-4190-7500-9500	Bond Issuance Costs	2,058	2,058	2,058
Total Expenditures		<u>\$ 165,000</u>	<u>\$ 2,058</u>	<u>\$ 590,400</u>
Ending Fund Balance				
89-300-0001	Fund Balance	\$ -	\$ 163,037	\$ -

* Prior year expenditures have been reconciled to the fund cash balance.

NOTICE OF PUBLIC HEARING

On November 2, 2010, during a Regular City Council Meeting, the City Council of the City of Copperas Cove will hold a public hearing on the ordinance to amend the FY 2009-10 Budget for the City of Copperas Cove. The November 2, 2010 City Council Meeting will begin at 7:00 pm and will be held in the City Council Chambers at City Hall, 507 South Main Street, Copperas Cove, Texas 76522.

The proposed amendments to the FY 2009-10 Annual Budget are as follows:

	Increase (Decrease)
General Fund	
Expenditure Appropriations	(\$835)
Golf Course Fund	
Expenditure Appropriations	\$835
City-Wide Donations Fund	
Revenue Appropriations	\$12,230
Expenditure Appropriations	\$12,230
Grants Fund	
Emergency Management Program Revenue	\$7,500
Emergency Management Expense Appropriations	\$7,500
Homeland Security Grant Revenue	\$11,172
Fire Grant Fund Expense Appropriations	\$11,172
Lone Star Library Grant Revenue	\$4,765
Library Grant Fund Expense Appropriations	\$4,765
Emergency Operation Center HSG Grant Revenue	\$50,000
Police Expense Appropriations	\$50,000
JAG Grant Revenue	\$80,177
Police (JAG) Expense Appropriations	\$80,177
CTCOG Grant Revenue	\$18,500
Police Expense Appropriations	\$18,500
2009 Limited Tax Notes – Water & Sewer	
Long Mtn Tank Rehab Expenditure Appropriations	(\$34,984)
West Clarifier Retrofit Expenditure Appropriations	\$34,984
2010 General Obligation – Water & Sewer	
Interest Revenue	\$8,000
Expenditure Appropriations	\$8,000
2010 General Obligation – Tax Supported	
Interest Revenue	\$2,000
Expenditure Appropriations	\$2,000

2010 Limited Tax Notes – Water & Sewer

Interest Revenue	\$8,500
Turkey Run Pump Station	(\$55,000)
North Loop Waterline	(\$3,340,711)
Water/Wastewater Rate Study	\$40,000
Fleet	\$26,300
Weir Gate (Facilities)	\$26,450
Northeast Waterline	\$1,123,231
Mountaintop Water	\$1,686,000
2012 CDBG Match	\$55,000
Water Model Update	\$15,000
Software (Tyler Content Manager)	\$7,230
Avenue F Reconstruction	\$425,000

2010 Limited Tax Notes – Tax Supported

Interest Revenue	\$400
Expenditure Appropriations	\$400

Date: 11/02/2010

Contact: Bob McKinnon, Public Works Director

Information

SUBJECT

Consideration and action on authorizing the City Manager to execute a contract with Matous Construction for replacement of Weir/Butterfly Gates at the Northwest Wastewater Treatment Plant. **Robert McKinnon, Public Works Director.**

BACKGROUND/HISTORY

The Northwest Plant was expanded/upgraded from a 1.2 million gallon a day plant to a 3.2 million gallon a day plant in 1991. As part of that expansion, two separate clarifiers, two aeration basins, a digester, and a thickener were installed. Basically, untreated sewerage enters the plant, is treated to remove harmful bacteria, solids are separated from liquids and at the completion of the process, treated liquids are returned to the streams of the state and treated solids are transported to the compost facility. The majority of the treatment process components are operated/controlled by a number of weir/butterfly gates which regulate flow into and out of the different areas of the plant, raise and lower flow levels, and allow draining for cleaning.

FINDINGS/CURRENT ACTIVITY

Three weir/butterfly gates are out of service which prevent flow adjustments, level adjustments and draining for cleaning. Adjustment stems are broken and two gates are wedged in channels and can not be removed without concrete removal.

River City Engineering provided professional services for replacement of the gates. Advertisements for bids were solicited in September and October 2010. On Thursday, October 14, 2010 one (1) bid was received and opened for the project. Matous Construction, Temple, Texas submitted the only bid in the amount of \$156,500. The bid tabulation and engineers recommendation are attached.

ACTION OPTIONS/RECOMMENDATION

City staff recommends the City Manager be authorized to execute a contract with Matous Construction Co. Inc., Temple, Texas for replacement of Weir/Butterfly Gates at the Northwest Plant.

Fiscal Impact

Funds available Y/N?: Y

FINANCIAL IMPACT:

Funding for the project will come from the 2008A and 2010 Limited Tax Notes.

Attachments

Link: [Bid tab-Weir Gate Replac.-NW](#)

Link: [Bid Recommenda.-Weir Gate Replacem-NW](#)

CITY OF COPPERAS COVE
 NW WWTP 2010 WEIR GATE REPLACEMENT
 BID TABULATION
 OCTOBER 14, 2010 - 2:00 PM

City of Copperas Cove
 Bid 2010-12-84

				Matous Construction	
Item #	Item	Quantity	Unit	Unit Price	Amount
1	Bonding, Mobilization and Insurance	1	LS	\$5,000.00	\$5,000.00
2	Environmental Protection / Erosion Control	1	LS	\$500.00	\$500.00
3	Remove & Dispose of Existing Weir and Pivot Gates	1	LS	\$18,000.00	\$18,000.00
4	Instillation of New Weir Gates	2	EA	<i>\$17,000.00</i>	\$34,000.00
5	Instillation of New Butterfly Gate	1	EA	\$97,000.00	\$97,000.00
6	Site Restoration	1	LS	\$2,000.00	\$2,000.00
GRAND TOTAL BASE BID (ITEMS 1 - 6)				\$156,500.00	

** Italics represents corrected values*



October 19, 2010

Mr. Bob McKinnon
CITY OF COPPERAS COVE
P.O. Drawer 1449
Copperas Cove, Texas 76522

**RE: Bid Recommendation
Northwest WWTP 2010 Weir Gate Replacement
Bid 2010-12-84**

Dear Mr. McKinnon:

On Thursday, October 14th, 2010 one (1) bid was received for the above listed project. The contractor's bid was in accordance with the contract documents prepared by our firm. Multiple firms and plan rooms were contacted twice and made aware of the bid but declined to submit. **Matous Construction** submitted the lowest Base Bid of **\$156,500.00**. We have enclosed the bid tabulations results for your review and consideration. We have checked the qualifications and references of the low bidder and find them to be in order. We therefore recommend the City award the project to **Matous Construction** in the amount of **\$156,500.00**.

If you have any questions please feel free to contact our office.

Sincerely,

Brandon Mettler, E.I.T.

P:\Projects\5019 (Copperas Cove)\94 - Northwest WWTP Weir Gate Replacement\Bid-Recommendation.doc

Date: 11/02/2010

Contact: Danny Zincke, Asst Director of Community Services

Information

SUBJECT

Consideration and possible action on authorizing the City Manager to execute an agreement for professional services with Bury and Partners Engineering Solutions for the golf course effluent project.
Danny Zincke, Director of Parks and Recreation

BACKGROUND/HISTORY

In October 2009 the City of Copperas Cove made the final switch over from potable to reclaimed irrigation water at the Hills of Cove Golf Course. In November 2009 the Hills of Cove Golf Course reported issues with the availability of water as well as issues pertaining to debris in the water causing problems in the system. In the Spring of 2010 when the system was for the first time turned on to full capacity the previously experienced issues were amplified due to the increased use. Golf course staff and waste water staff met on several occasions to discuss possible solutions. Once the determination was made that the problem was best solved by an engineering firm, City staff contacted Bury & Partners for an engineering proposal. A municipality may select an engineering firm based only on qualifications and not pricing. Furthermore, Bury & Partners completed multiple public works projects with a successful outcome, thus the firm was selected by staff.

FINDINGS/CURRENT ACTIVITY

On November 2, 2010 City Council held a work shop to discuss the golf course irrigation project, the possible solutions and the associated cost. Bury and Partners Engineering Solutions provided a presentation to the City Council on the golf course effluent project during a workshop conducted prior to the regular meeting.

The standard agreement for professional services was reviewed and approved by City staff.

ACTION OPTIONS/RECOMMENDATION

City staff recommends City Council authorize the City Manager to execute an agreement for professional services with Bury + Partners Engineering Solutions for the golf course effluent project.

Fiscal Impact

Funds available Y/N?: Y

FINANCIAL IMPACT:

The financial impact of the Engineering services for the project is \$ 60,446. The funds for this project were designated in the 2010-2011 CIP budget.

Attachments

Link: [Standard Pro agreement](#)

Link: [Bury Proposal](#)

CITY OF COPPERAS COVE
STANDARD PROFESSIONAL SERVICES AGREEMENT

THE STATE OF TEXAS §
 §
CORYELL COUNTY §

This Professional Services Agreement (“Agreement”) is made and entered by and between the City of Copperas Cove, Texas, (the “City”) a Texas municipality, and _____ (“Professional”).

Section 1. Duration. This Agreement shall become effective upon _____ and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

Section 2. Scope of Work.

(A) Professional shall perform the Services as more particularly described in the Scope of Work attached hereto as Exhibit “A”. The work as described in the Scope of Work constitutes the “Project”. Unless otherwise provided in the Scope of Work, the anticipated submittal of all Project deliverables is immediately upon completion of the Project.

(B) The Quality of Services provided under this Agreement shall be of the level of professional quality performed by Professionals regularly rendering this type of service.

(C) The Professional shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.

(D) The Professional may rely upon the accuracy of reports and surveys provided to it by the City except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

Section 3. Compensation.

(A) The Professional shall be paid in the manner set forth in Exhibit “A” and as provided herein.

(B) *Billing Period:* The Professional may submit monthly, or less frequently, an invoice for payment based on the estimated completion of the described tasks and approved work schedule. Subject to Chapter 2251, Texas Government Code (the “Prompt Payment Act”), payment is due within thirty (30) days of the City’s receipt of the Professional’s invoice. Interest on overdue payments shall be calculated in accordance with the Prompt Payment Act.

(C) *Reimbursable Expenses:* Any and all reimbursable expenses related to the Project shall be included in the scope of services (Exhibit A) and accounted for in the total contract amount. If these items are not specifically accounted for in Exhibit A they shall be considered subsidiary to the total contract amount.

Section 4. Changes to the Project Work; Additional Work.

(A) *Changes to Work:* Professional shall make such revisions to any work that has been completed as are necessary to correct any errors or omissions as may appear in such work. If the City finds it necessary to make changes to previously satisfactorily completed work or parts thereof, the Professional shall make such revisions if requested and as directed by the City and such services will be considered as additional work and paid for as specified under following paragraph.

(B) *Additional Work:* The City retains the right to make changes to the Scope of Work at any time by a written order. Work that is clearly not within the general description of the Scope of Work and not does not otherwise constitute special services under this Agreement must be approved in writing by the City by supplemental agreement before the additional work is undertaken by the Professional. If the Professional is of the opinion that any work is beyond that contemplated in this Agreement and the Scope of Work governing the project and therefore constitutes additional work, the Professional shall promptly notify the City of that opinion, in writing. If the City agrees that such work does constitute additional work, then the City and the Professional shall execute a supplemental agreement for the additional work and the City shall compensate the Professional for the additional work on the basis of the rates contained in the Scope of Work. If the changes deduct from the extent of the Scope of Work, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement. Any work undertaken by Professional not previously approved as additional work shall be at risk of the Professional.

Section 5. Time of Completion.

The prompt completion of the services under the Scope of Work relates is critical to the City. Unnecessary delays in providing services under a Scope of Work shall be grounds for dismissal of the Professional and termination of this Agreement without any or further liability to the City other than a prorated payment for necessary, timely, and conforming work done by Professional prior to the time of termination. The Scope of Work shall provide, in either calendar days or by providing a final date, a time of completion prior to which the Professional shall have completed all tasks and services described in the Scope of Work.

Section 6. Insurance.

Before commencing work under this Agreement, Professional shall obtain and furnish to the City evidence of the following insurance during the term of this Agreement and thereafter as required herein:

Professional Liability Insurance: professional errors and omissions liability insurance with limits of liability not less than \$1,000,000 per occurrence covering all work performed by the Professional, its employees, sub-contractors, or independent contractors. If this coverage can only be obtained on a "claims made" basis, the certificate of insurance must clearly state coverage is on a "claims made" basis and coverage must remain in effect for at least two years after final payment with the Professional continuing to furnish the City certificates of insurance.

Workers Compensation Insurance: The Professional shall carry and maintain during the term of this Agreement, workers compensation and employers liability insurance meeting the requirements of the State of Texas on all the Professional's employees carrying out the work involved in this contract.

General Liability Insurance: The Professional shall carry and maintain during the term of this Agreement, general liability insurance on a per occurrence basis with limits of liability not less than \$1,000,000 for each occurrence and for fire damage. For Bodily Injury and Property Damage no less than \$1,000,000. As a minimum, coverage for Premises, Operations, Products and Completed Operations shall be \$2,000,000. This coverage shall protect the public or any person from injury or property damages sustained by reason of the Professional or its employees carrying out the work involved in this Agreement. The general aggregate shall be no less than \$2,000,000.

Automobile Liability Insurance: Professional shall carry and maintain during the term of this Agreement, automobile liability insurance with either a combined limit of at least

\$1,000,000 per occurrence for bodily injury and property damage or split limits of at least \$1,000,000 for bodily injury per person per occurrence and \$1,000,000 for property damage per occurrence. Coverage shall include all owned, hired, and non-owned motor vehicles used in the performance of this contract by the Professional or its employees.

Subcontractor: In the case of any work sublet, the Professional shall require subcontractor and independent contractors working under the direction of either the Professional or a subcontractor to carry and maintain the same workers compensation and liability insurance required of the Professional.

Qualifying Insurance: The insurance required by this Agreement shall be written by non-assessable insurance company licensed to do business in the State of Texas and currently rated "B" or better by the A.M. Best Companies. All policies shall be written on a "per occurrence basis" and not a "claims made" form.

Section 7. Miscellaneous Provisions.

(A) *Subletting.* The Professional shall not sublet or transfer any portion of the work under this Agreement or any Scope of Work issued pursuant to this Agreement unless specifically approved in writing by the City, which approval shall not be unreasonably withheld. Subcontractors shall comply with all provisions of this Agreement and the applicable Scope of Work. The approval or acquiescence of the City in the subletting of any work shall not relieve the Professional of any responsibility for work done by such subcontractor.

(B) *Ownership of Documents.* Upon completion or termination of this Agreement, all documents prepared by the Professional or furnished to the Professional by the City shall be delivered to and become the property of the City. All drawings, charts, calculations, plans, specifications and other data, including electronic files and raw data, prepared under or pursuant to this Agreement shall be made available, upon request, to the City without restriction or limitation on the further use of such materials PROVIDED, HOWEVER, THAT SUCH MATERIALS ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY THE CITY OR OTHERS. ANY REUSE WITHOUT PRIOR VERIFICATION OR ADAPTATION BY THE PROFESSIONAL FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE CITY'S SOLE RISK AND WITHOUT LIABILITY TO THE PROFESSIONAL. Where applicable, Professional shall retain all pre-existing proprietary rights in the materials provided to the City but shall grant to the City a non-exclusive, perpetual, royalty-free license to use such proprietary information solely for the purposes for which the information was provided. The Professional may, at Professional's expense, have copies made of the documents or any other data furnished to the City under or pursuant to this Agreement.

(C) *Professional's Seal.* To the extent that the Professional has a professional seal it shall placed on all documents and data furnished by the Professional to the City. All work and services provided under this Agreement will be performed in a good and workmanlike fashion and shall conform to the accepted standards and practices of the Professional's industry. The plans, specifications and data provided by Professional shall be adequate and sufficient to enable those performing the actual work to perform the work as and within the time contemplated by the City and Professional. The City acknowledges that Professional has no control over the methods or means of work nor the costs of labor, materials or equipment. Unless otherwise agreed in writing, any estimates of costs by the Professional are for informational purposes only and are not guarantees.

(D) *Compliance with Laws.* The Professional shall comply with all federal, state and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts, administrative, or regulatory bodies in any matter affecting the performance of this Agreement, including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Professional shall furnish the City with satisfactory proof of compliance.

(E) *Independent Contractor.* Professional acknowledges that Professional is an independent contractor of the City and is not an employee, agent, official or representative of the City. Professional shall not represent, either expressly or through implication, that Professional is an employee, agent, official or representative of the City. Income taxes, self-employment taxes, social security taxes and the like are the sole responsibility of the Professional.

(F) *Non-Collusion.* Professional represents and warrants that Professional has not given, made, promised or paid, nor offered to give, make, promise or pay any gift, bonus, commission, money or other consideration to any person as an inducement to or in order to obtain the work to be provided to the City under this Agreement. Professional further agrees that Professional shall not accept any gift, bonus, commission, money, or other consideration from any person (other than from the City pursuant to this Agreement) for any of the services performed by Professional under or related to this Agreement. If any such gift, bonus, commission, money, or other consideration is received by or offered to Professional, Professional shall immediately report that fact to the City and, at the sole option of the City, the City may elect to accept the consideration for itself or to take the value of such consideration as a credit against the compensation otherwise owing to Professional under or pursuant to this Agreement.

(G) *Force Majeure.* If the performance of any covenant or obligation to be performed hereunder by any party is delayed as a result of circumstances which are beyond the reasonable control of such party (which circumstances may include, without limitation,

pending litigation, acts of God, war, acts of civil disobedience, fire or other casualty, shortage of materials, adverse weather conditions [such as, by way of illustration and not of limitation, severe rain storms or below freezing temperatures, or tornados] labor action, strikes or similar acts, moratoriums or regulations or actions by governmental authorities), the time for such performance shall be extended by the amount of time of such delay, but no longer than the amount of time reasonably occasioned by the delay. The party claiming delay of performance as a result of any of the foregoing force majeure events shall deliver written notice of the commencement of any such delay resulting from such force majeure event not later than seven (7) days after the claiming party becomes aware of the same, and if the claiming party fails to so notify the other party of the occurrence of a force majeure event causing such delay and the other party shall not otherwise be aware of such force majeure event, the claiming party shall not be entitled to avail itself of the provisions for the extension of performance contained in this subsection.

(H) In the case of any conflicts between the terms of this Agreement and wording contained within the Scope of Services, this Agreement shall govern. The Scope of Services is intended to detail the technical scope of services, fee schedule, and contract time only and shall not dictate Agreement terms.

Section 8. Termination.

(A) This Agreement may be terminated:

- (1) By the mutual agreement and consent of both Professional and City;
- (2) By either party, upon the failure of the other party to fulfill its obligations as set forth in either this Agreement or a Scope of Work issued under this Agreement;
- (3) By the City, immediately upon notice in writing to the Professional, as consequence of the failure of Professional to perform the services contemplated by this Agreement in a timely or satisfactory manner;
- (4) By the City, at will and without cause upon not less than thirty (30) days written notice to the Professional.

(B) If the City terminates this Agreement pursuant to Section 5 or subsection 8(A)(2) or (3), above, the Professional shall not be entitled to any fees or reimbursable expenses other than the fees and reimbursable expenses then due and payable as of the time of termination and only then for those services that have been timely and adequately performed by the Professional considering the actual costs incurred by the Professional in performing work to date of termination, the value of the work that is nonetheless usable to the City, the cost to the City of employing another Professional to complete the work required and the time required to do so, and other factors that affect the value to the City of

the work performed at time of termination. In the event of termination not the fault of the Professional, the Professional shall be compensated for all basic, special, and additional services actually performed prior to termination, together with any reimbursable expenses then due.

Section 9. Indemnification. Professional agrees to indemnify and hold the City of Copperas Cove, Texas and all of its present, future and former agents, employees, officials and representatives harmless in their official, individual and representative capacities from any and all claims, demands, causes of action, judgments, liens and expenses (including attorney's fees, whether contractual or statutory), costs and damages (whether common law or statutory), costs and damages (whether common law or statutory, and whether actual, punitive, consequential or incidental), of any conceivable character, for injuries to persons (including death) or to property (both real and personal) created by, arising from or in any manner relating to the services or goods performed or provided by Professional – expressly including those arising through strict liability or under the constitutions of the United States or Texas – BUT ONLY TO THE EXTENT ALLOWABLE BY SEC. 271.904(a) OF THE TEXAS LOCAL GOVERNMENT CODE AS APPLICABLE.

Section 10. Notices. Any notice required or desired to be given from one party to the other party to this Agreement shall be in writing and shall be given and shall be deemed to have been served and received (whether actually received or not) if (i) delivered in person to the address set forth below; (ii) deposited in an official depository under the regular care and custody of the United States Postal Service located within the confines of the United States of America and sent by certified mail, return receipt requested, and addressed to such party at the address hereinafter specified; or (iii) delivered to such party by courier receipted delivery. Either party may designate another address within the confines of the continental United States of America for notice, but until written notice of such change is actually received by the other party, the last address of such party designated for notice shall remain such party's address for notice.

Section 11. No Assignment. Neither party shall have the right to assign that party's interest in this Agreement without the prior written consent of the other party.

Section 12. Severability. If any term or provision of this Agreement is held to be illegal, invalid or unenforceable, the legality, validity or enforceability of the remaining terms or provisions of this Agreement shall not be affected thereby, and in lieu of each such illegal, invalid or unenforceable term or provision, there shall be added automatically to this Agreement a legal, valid or enforceable term or provision as similar as possible to the term or provision declared illegal, invalid or unenforceable.

Section 13. Waiver. Either City or the Professional shall have the right to waive any requirement contained in this Agreement that is intended for the waiving party's benefit, but, except as otherwise provided herein, such waiver shall be effective only if in writing executed by the party for whose benefit such requirement is intended. No waiver of any breach or violation of any term of this Agreement shall be deemed or construed to constitute a waiver of any other breach or violation, whether concurrent or subsequent, and whether of the same or of a different type of breach or violation.

Section 14. Governing Law; Venue. This Agreement and all of the transactions contemplated herein shall be governed by and construed in accordance with the laws of the State of Texas. The provisions and obligations of this Agreement are performable in Coryell County, Texas such that exclusive venue for any action arising out of this Agreement shall be in Coryell County, Texas.

Section 15. Paragraph Headings; Construction. The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraphs hereof. Both parties have participated in the negotiation and preparation of this Agreement and this Agreement shall not be construed either more or less strongly against or for either party.

Section 16. Binding Effect. Except as limited herein, the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, devisees, personal and legal representatives, successors and assigns.

Section 17. Gender. Within this Agreement, words of any gender shall be held and construed to include any other gender, and words in the singular number shall be held and construed to include the plural, unless the context otherwise requires.

Section 18. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.

Section 19. Exhibits. All exhibits to this Agreement are incorporated herein by reference for all purposes wherever reference is made to the same.

Section 20. Entire Agreement. It is understood and agreed that this Agreement contains the entire agreement between the parties and supersedes any and all prior agreements, arrangements or understandings between the parties relating to the subject matter. No oral understandings, statements, promises or inducements contrary to the terms of this Agreement exist. This Agreement cannot be changed or terminated orally.

Section 21. Relationship of Parties. Nothing contained in this Agreement shall be

deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent or of partnership or of joint venture or of any association whatsoever between the parties, it being expressly understood and agreed that no provision contained in this Agreement nor any act or acts of the parties hereto shall be deemed to create any relationship between the parties other than the relationship of independent parties contracting with each other solely for the purpose of effecting the provisions of this Agreement.

Section 22. Right To Audit. City shall have the right to examine and audit the books and records of Professional at any reasonable time. Such books and records will be maintained in accordance with generally accepted principles of accounting and will be adequate to enable determination of: (1) the substantiation and accuracy of any payments required to be made under this Agreement; and (2) compliance with the provisions of this Agreement.

23. Dispute Resolution. In accordance with the provisions of Subchapter I, Chapter 271, TEX. LOCAL GOV'T CODE, the parties agree that, prior to instituting any lawsuit or other proceeding arising from a dispute under this agreement, the parties will first attempt to resolve the dispute by taking the following steps: (1) A written notice substantially describing the nature of the dispute shall be delivered by the dissatisfied party to the other party, which notice shall request a written response to be delivered to the dissatisfied party not less than 5 days after receipt of the notice of dispute. (2) If the response does not reasonably resolve the dispute, in the opinion of the dissatisfied party, the dissatisfied party shall give notice to that effect to the other party whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in an effort to resolve the dispute. (3) If those persons cannot or do not resolve the dispute, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the dispute.

24. Disclosure of Business Relationships/Affiliations; Conflict of Interest Questionnaire. Professional represents that it is in compliance with the applicable filing and disclosure requirements of Chapter 176 of the Texas Local Government Code.

EXECUTED on this the _____ day of _____, 2010.

CITY:

By: _____

Name: Andrea M. Gardner

Title: City Manager

PROFESSIONAL:

By: _____

Name: _____

Title: _____

ADDRESS FOR NOTICE:

CITY

507 S. Main Street
Copperas Cove, TX 76522

PROFESSIONAL

with a copy to:

City Attorney
City of Copperas Cove, Texas
507 S. Main Street
Copperas Cove, TX 76522

October 13, 2010

Proposal No. 10-050

Mr. Wesley Wright, P.E.
City Engineer
City of Copperas Cove
1601 North 1st Street
P.O. Drawer 1449
Copperas Cove, Texas 76522

RE: Proposal for Professional Engineering Services
Golf Course Reclaimed Water System Optimization Project

Dear Mr. Wright:

Bury+Partners, Inc. (Bury) appreciates the opportunity to submit this proposal for professional engineering services for a Golf Course Reclaimed Water System Optimization Project for the City of Copperas Cove's Golf Course and Northeast Wastewater Treatment Plant (WWTP). Based upon our conversations, we understand that the project will consist of the preparation of a Preliminary Engineering Report to identify alternatives and costs associated with increasing available reclaimed water storage on the golf course, and reducing operational difficulties with the reclaimed water, followed by the preparation of Plan and Specifications for the construction of the selected improvements, Bidding Phase Services, and Construction Phase Services. A detailed Scope of Services is as follows:

SCOPE OF SERVICES

A. Preliminary Engineering Report

Operational issues with the existing Reclaimed Water System include a lack of adequate reclaimed water storage for effective operations and difficulties with the reclaimed water.

Bury proposes to prepare a Preliminary Engineering Report identifying and comparing alternatives for increasing available reclaimed water storage on the golf course, and reducing operational difficulties with the reclaimed water. Alternatives for increasing available reclaimed

BURY+PARTNERS, INC.
221 West Sixth Street, Suite 600
Austin, Texas 78701

TEL (512) 328-0011
FAX (512) 328-0325

water storage include installation of a reclaimed water storage pond on the golf course. The proposed pond may be able to be installed with associated piping and valves to allow the pond to be filled via the existing pump station. Additionally, it may be possible to install piping and valves to allow the existing pump station to pump water from the proposed pond into the existing irrigation system.

Difficulties with the reclaimed water include biological growth (algae, etc.) in the reclaimed water which frequently clogs the existing strainer on the discharge of the irrigation pumps, resulting in pumping problems and increased maintenance associated with cleaning the strainer. Additionally, solids in the reclaimed water frequently clog or break sprinkler heads on the golf course irrigation system, resulting in increased maintenance.

Alternatives for resolving these issues with the reclaimed water include installation of a more effective and lower maintenance filtration system. Filtration systems specifically designed for this application are available at purchase prices below \$30,000, are equipped with multiple filter elements, and are able to automatically backwash a single filter element while the other elements are still in use (the existing strainer cannot concurrently backwash and filter water).

Another alternative for resolving the operational issues with the reclaimed water includes installation of a residual disinfectant dosing system. Currently, the WWTP uses Ultraviolet light (UV) disinfection, which provides operational advantages at the WWTP (no chemical storage or need to de-chlorinate). Additionally, Texas Commission on Environmental Quality (TCEQ) rules do not require addition of a residual disinfectant for Type 2 Reclaimed Water use. However, addition of a residual disinfectant could decrease the biological growth currently forming in the reclaimed water, and provide additional disinfection of the reclaimed water.

Bury will provide an alternatives analysis comparing the above alternatives and providing recommendations to the City for implementation.

Upon completion of the Preliminary Engineering Report and selection of an alternative for implementation, Final Design services will commence.

B. Final Design

Upon selection of an alternative for implementation, Bury will prepare plans and specifications for public bid and construction. The design will be in accordance with TCEQ and City rules and regulations. Bidding Documents will be submitted to the City and TCEQ for approval prior to construction of the facilities.

C. Bidding Phase Services

Our proposed activities during the bidding phase will include the following:

1. Assist the City in completing the Contract Document package and assist in distribution to the contractor(s).
2. Attend a pre-bid meeting at site.
3. Answering contractor's and supplier's questions and issuing addenda.
4. Assist with bid opening and contractor selection and award.

D. Construction Phase Services

Bury will provide assistance during construction to observe the progress and quality of Work completed by the Contractor. Observations are not intended to be an exhaustive check or detailed inspection of the Work. Bury will perform observations to become familiar with the Work in progress and to determine the general conformance with the Contract Documents developed for the project. Construction is assumed to last four (4) months and require up to five (5) construction progress meetings and weekly site visits to observe construction. During the construction observation phase Bury will provide the following services:

1. Attend the pre-construction conference with the City and Contractor prior to construction.
2. Provide weekly on-site construction observation services during the course of the Work to observe the progress.
3. Issue clarifications and interpretations to the Contract Documents as appropriate.
4. Recommend change orders as appropriate.
5. Review shop drawings and submittals.
6. Render formal written decisions on all claims of the Contractor related to the interpretation of the Contract Documents.
7. Review and make recommendations for progress payments for work completed during construction period in accordance with the Contract requirements.
8. Once construction has been substantially completed, complete a final site observation visit and prepare a punch list as required. Once the punch list has been significantly completed, prepare a Certificate of Completion.

E. Reimbursables

Reproduction, mileage and delivery services will be provided for this project and billed in accordance to our Standard Rate Schedule. In addition, minor out-of-pocket expenses for outside reproduction, courier fees, etc. incurred will be bill at Cost+10%.

FEE SCHEDULE

We propose to provide the specific services described above on a lump sum fee basis as follows:

<u>Item</u>	<u>Fee Basis</u>	<u>Bury Fee</u>	<u>Bury Phase</u>
A. Preliminary Engineering Report	Lump Sum	\$ 9,975	.20
B. Final Design	Lump Sum	\$26,463	.30
C. Bidding Phase Services	Lump Sum	\$ 6,323	.35
D. Construction Phase Services	Lump Sum	\$16,685	.70
E. Reimbursables	Cost + 10%	\$ 1,000	.89

ASSUMPTIONS

In preparing this proposal, we have made the following assumptions:

- The City will provide electronic (CAD) drawing files for our use in designing the proposed improvements, such that a design survey will not be required
- Construction observation visits will be one day per week, as required
- TCEQ will not generate any comments to be addressed before acceptance of the proposed improvements.
- The Alternatives analyzed during the Preliminary Engineering Report phase will be limited to the items discussed in this proposal
- No revisions to the scope of the project will be made after an alternative is selected during the Preliminary Engineering Report Phase
- Bury will provide one time construction staking for the proposed improvements

Bury appreciates the opportunity to submit this proposal and look forward to assisting the City of Copperas Cove in this matter. Upon your review of this proposal, please feel free to contact me if you have any questions or desire additional information regarding this proposal.

Sincerely,

Trey S. Taylor, P.E.
Senior Associate

Will Wheeler, P.E.
Managing Principal

Date: 11/02/2010

Contact: Andrea Gardner, City Manager,
City Manager

Information

SUBJECT

Consideration and action on appointments to the City of Copperas Cove TIRZ Number One (Valley at Great Hills) Board Member Positions One through Four. **Andrea M. Gardner, City Manager**

BACKGROUND/HISTORY

Ordinance 2008-19 was approved on June 17, 2008 creating TIRZ Number One within the City of Copperas Cove. The TIRZ Creation Ordinance stipulated positions One (1) through Four (4) on the Board as reserved for the City. The Ordinance further stipulated that Board appointments to odd-numbered positions shall be appointed for two year terms, beginning on the effective date of the Ordinance, while the directors appointed to even-numbered positions shall be appointed to a one year term, beginning on the effective date of the Ordinance. All subsequent appointments shall be for two-year terms. Furthermore, the Ordinance stipulated the member of the Board of Directors appointed to Position One be designated to serve as the chair of the Board of Directors for a one-year term beginning on the effective date of the Ordinance. Thereafter the Mayor shall annually nominate and appoint, subject to City Council approval, a member to serve as chair for a term of one year beginning on the anniversary of the effective date of the Ordinance. The City Council authorizes the Board of Directors to elect from its members a vice-chairman and such other officers as the Board of Directors sees fit.

On August 5, 2008, the Council appointed the following individuals to serve on the TIRZ One Board in Positions One through Four:

Appointee Name	Position	Term Expiration
Dan Yancey	1 (Chair)	June 17, 2009
Frank Somera, Jr	2	June 17, 2009
Gene Dane	3	June 17, 2010
Jack Smith	4	June 17, 2009

FINDINGS/CURRENT ACTIVITY

Based on the requirements of Ordinance 2008-19, Position One needs to be appointed for the unexpired term ending on June 17, 2011, Position Two for the unexpired term ending on June 17, 2011, Position Three for the unexpired term ending on June 17, 2012 and Position Four for unexpired term ending on June 17, 2011.

ACTION OPTIONS/RECOMMENDATION

City staff recommends the Mayor nominate and the Council appoint Board Members to the City of Copperas Cove TIRZ Board Number One.

Fiscal Impact

Funds available Y/N?: Y

FINANCIAL IMPACT:

None

Date: 11/02/2010

Contact: Andrea Gardner, City Manager,
City Manager

Information

SUBJECT

Consideration and action on a resolution to authorize intervention at the Railroad Commission in Atmos Pipeline - Texas' request to increase rates for City-Gate and Pipeline Transportation Gas Service.

Andrea M. Gardner, City Manager.

BACKGROUND/HISTORY

Atmos Pipeline – Texas (APT) filed a request with Railroad Commission of Texas on September 17, 2010 to increase wholesale rates by approximately \$38.9 million for its city-gate services (CGS) and its pipeline-transportation (PT) services.

FINDINGS/CURRENT ACTIVITY

Because APT proposes to reduce the rates to provide service to the industrial pipeline-transportation customers, rates APT charges to Atmos Energy Corporation – Mid-Tex Division, will increase by about \$43 million. The increases will in turn be passed on to Atmos-Mid-Tex Division’s retail customers.

APT’s application raises numerous issues regarding its proposed increase, including the following:

- The amount of the increase requested and the allocation of an increase to Atmos – Mid Tex but a reduction to the industrial PT customers.
- Overall rate increase proposed is \$38.9 million, but with \$43 million (more than 100%) going to Mid-Tex due to rate reductions proposed for directly served industrial Pipeline Transportation (Rate PT) customers, summarized as follows:

APT Proposed Rate Changes

	Revenues	Percent
PT Class	\$(5,066,025)	-56.9
<i>CGS Customers</i>		
Mid-Tex	43,086,138	41.2
Coserv	1,556,598	59.5
Rising Star	(24,000)	-68.2
West Texas	(23,896)	-71.9
<i>Total CGS</i>	<i>44,594,840</i>	<i>41.6</i>
Total	\$39,528,815	34.0

• The total Cost of Service asserted by Atmos Pipeline-Texas is \$234 million (see COS Schedule A) which is offset by competitive opportunity sales margins to competitive customers in the proposed amount of \$78 million. A new “Rider REV” Tracking mechanism is proposed for APT’s competitive “Other Revenue” customer class, which would pass through 75% of difference between actual and this proposed test year margin revenue between rate cases.

- Test year margins of \$78.1 million are net of APT’s \$11.5 million adjustment reducing recorded

margins to reflect known changes.

- Significant policy issues are raised by the risk shifting and sharing attributes of this sharing proposal. APT argues it is “risky” to serve these customers, such that a higher ROE of 12.75% is justified (with other risks cited as well), but the rider would shift most risks to ratepayers if approved.
- A return on equity of 12.75%.
- Approval of the Company’s \$482 million “GRIP” investments from January 2003 through March 2010.
- Several accounting adjustments in areas that have been controversial in Atmos Mid-Tex’ cases (including incentive compensation plans, labor costs, deferred taxes, franchise taxes).
- Affiliate transactions:
 - How are customers and assets transferred between APT and Atmos Mid-Tex?
 - Are APT competitive transportation prices fairly negotiated for Atmos Energy Marketing customers within bundled gas supply deals?
 - Blue Flame captive insurance affiliate premiums are excessive, relative to the small risk layer insured.
- APT’s new depreciation rate study.

ACTION OPTIONS/RECOMMENDATION

City staff recommends the City Council approve a resolution authorizing the intervention at the Railroad Commission in Atmos Pipeline - Texas' request to increase rates for City-Gate and Pipeline Transportation Gas Service.

Fiscal Impact

Funds available Y/N?: N

FINANCIAL IMPACT:

Pursuant to the provisions of Section 103.022 of the Texas Utilities Code cities are entitled to have their reasonable rate case expenses reimbursed.

Attachments

Link: [Atmos Pipeline Rate Case Resolution](#)

RESOLUTION NO. 2010-42

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS (CITY) AUTHORIZING THE INTERVENTION AT THE RAILROAD COMMISSION OF TEXAS CONCERNING THE FILING FOR AN INCREASE IN RATES BY ATMOS PIPELINE – TEXAS; REQUIRING ATMOS PIPELINE TO REIMBURSE REASONABLE RATE CASE EXPENSES; AUTHORIZING THE RETENTION OF COUNSEL AND RATE CONSULTANTS; FINDING THAT THE MEETING AT WHICH THIS RESOLUTION WAS APPROVED COMPLIED WITH THE OPEN MEETINGS ACT; MAKING SUCH OTHER FINDINGS AND OTHER PROVISIONS RELATED TO THE SUBJECT; AND PROVIDINGT FOR AN EFFECTIVE DATE

WHEREAS, on or about September 17, 2010, Atmos Pipeline – Texas (APT or Company), a division of Atmos Energy Corporation, filed with the Railroad Commission of Texas (“RCT”) a request to increase its city gate service (CGS) rates and its pipeline transportation (PT) rates; and,

WHEREAS, the APT’s request will increase revenues by approximately \$38.9 million but because of the manner in which APT proposes to recover the increase from its wholesale customers, rates APT charges to Atmos Energy Corporation – Mid-Tex Division, will increase by about \$43 million, which represents an increase of approximately 41.2% in the CGS rate, which will ultimately be recovered from retail customers; and,

WHEREAS, APT is requesting a return on equity of 12.75%, which is materially higher than any utility has requested or that the RCT has approved; and,

WHEREAS, APT seeks formal approval of certain investments made under the Gas Utility Regulatory Act (GURA), § 104.301, often referred to as the “GRIP

Statute,” in the amount of about \$482 million for expenditures made during the period of January 2003 through March 2010; and,

WHEREAS, several accounting adjustments during that time period related to APT’s operation and maintenance expenses that APT proposes, require detailed examination; and,

WHEREAS, APT is part of a larger corporation, which raises numerous issues regarding APT’s affiliate transactions; and,

WHEREAS, utility law is a complex area of law requiring specialized expertise in the examination of APT’s books and records; and,

WHEREAS, given that APT has proposed an October 22, 2010 effective date for this increase it is important to act promptly to intervene at the Railroad Commission of Texas; and,

WHEREAS, the City has participated as a member of a coalition of cities known as the Atmos Texas Municipalities (ATM) in matters regarding Atmos Mid-Texas and has benefitted from its participation and membership in such coalition; NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COPPERAS COVE, TEXAS:

Section 1. That the statements and findings set out in the preamble to this resolution are hereby in all things approved and adopted.

Section 2. That subject to the right to terminate employment at any time, the City employs the Herrera & Boyle law firm to represent the City in Railroad Commission GUD Docket No. 10000 and with regard to any administrative proceedings

or court actions related thereto, and the City authorizes counsel to employ, with the approval of the ATM Steering Committee, such rate experts as are necessary to assist them with regard to the review, investigation and possible filing of testimony in GUD Docket No. 10000.

Section 3. The City authorizes counsel to intervene on behalf of the City in GUD Docket No. 10000.

Section 4. Atmos shall on a monthly basis reimburse the City, by payment to the designated City representing ATM for this purpose, for the reasonable costs of attorneys and consultants and expenses related thereto as provided in Texas Utility Code, Section 103.022, upon the presentation of invoices reviewed by the Steering Committee.

Section 5. The meeting at which this resolution was approved was in all things conducted in strict compliance with the Texas Open Meetings act, Texas Government Code, Chapter 551.

Section 6. This resolution shall take effect immediately from and after its passage.

PASSED AND APPROVED this 2nd day of November, 2010.

Mayor

ATTEST:

City Secretary

Date: 11/02/2010

Contact: Andrea Gardner, City Manager,
City Manager

Information

SUBJECT

Consideration and action on 2011 Texas Coalition for Affordable Power (TCAP) Board Nominations.
Andrea M. Gardner, City Manager.

BACKGROUND/HISTORY

On September 7, 2010, the City Council authorized the City Manager to complete the Merger Ballot approving the proposed merger of CAPP and STAP effective January 1, 2011 and changes the name of CAPP to TCAP effective November 1, 2010 and acceptance of the TCAP Bylaws effective November 1, 2010.

FINDINGS/CURRENT ACTIVITY

On October 18, 2010, the City Manager was notified of an opportunity to nominate interested individuals to serve as a director on the TCAP Board. All nominations must be received by November 10, 2010 and each nomination must include completion of the attached nomination form including:

- the name of the candidate;
- political subdivision where candidate is employed;
- a one paragraph bio for the candidate (especially containing any background information relating to electric utilities or electric account analysis).

As with CAPP, TCAP will be a fully functioning political subdivision corporation monitoring the performance of over 150 electric supply contracts for members. Thus, board membership involves some time and travel commitments. The Board of Directors' travel expenses are reimbursable and board members are encouraged to apply for reimbursement (a sample CAPP Board Travel Policy is attached). The TCAP Board will likely meet monthly. The location of the meetings will alternate between the DFW area and South-Central Texas to accommodate all board members. The TCAP Bylaw Section 3.5 specifies that a director who misses two meetings in a 12-month period shall be automatically removed subject to the discretion of the Board to excuse an absence.

The board will be comprised of Places 1-15 serving 2 year terms. The initial term of office for odd numbered Board Positions will be two (2) years and the initial term of office for even numbered Board Positions will be one (1) year. The City consumed 6,886,116 kWh during the past 12 months (10/09 to 10/10).

Place Nos. 1-6 (six places)

Entities with electric consumption greater than or equal to 30 million kWh

Place Nos. 7-9 (3 places)

Entities with electric consumption equal to or greater than 15 million kWh, but less than 30 million kWh

Place Nos. 10-11 (2 places)

Entities with electric consumption less than 15 million kWh

Place Nos. 12-15 (4 places)

To be filled by nominees with the next highest votes in the above categories

ACTION OPTIONS/RECOMMENDATION

City staff recommends the City Council take action on the nominations for the 2011 TCAP Board.

Attachments

Link: [TACP Nomination Form](#)

Link: [CAPP Travel Policy](#)

Sample CAPP Board Travel Policy

Section 1

All Board members of CAPP whose attendance at board meetings, educational seminars, business meetings, criminal or civil trials, state and federal legislative meetings, or public hearings is necessary to conduct CAPP business or in some way benefits CAPP may be reimbursed for reasonable expenses related to their attendance in conformance with the policies established in this article.

Section 2

Travel expenses incurred by board members attending board meetings will not be reimbursed if travel to the board meeting is within a fifty-mile radius of the meeting site. Spouses may accompany CAPP board members on CAPP business trips but shall not be reimbursed for expenses related to their travel. Board approval must be obtained prior to reimbursement of out-of-state travel.

Section 3

The chairman shall be responsible for the administration and proper enforcement of these policies. Request for advance payment or reimbursement of travel expenses shall be made on formal CAPP travel forms.

Section 4

Travel expenses shall be reimbursed as incurred. It is the responsibility of the traveler to select the least expensive and most expeditious form of travel to a particular location.

- a. Public transportation expenses shall be reimbursed as incurred.
- b. Use of personal vehicle to travel to a particular destination shall be reimbursed at the mileage rate allowed by the Internal Revenue Service as a mileage deduction. Reimbursement for actual miles driven as indicated by a vehicle's odometer may be made if such mileage does not exceed the total distance indicated on the State of Texas Department Official Highway Travel map mileage chart by more than five percent.
- c. Expenses incurred for the rental of vehicles are permitted if public transportation facilities are inadequate or are more expensive than the cost of vehicle rental.
- d. All lodging expenses (with the exception of meals and beverages) will be reimbursed as incurred.
- e. All travelers will be given a per diem meal allowance of \$40.00 for each full day spent on domestic travel. For partial days, reimbursement shall be made as follows: breakfast--\$8.00; lunch--\$12.00; and dinner--\$20.00. An allowance shall not be given for meals included as part of registration fees.
- f. Receipts shall accompany all requests for reimbursement. Receipts are not required for meals purchased through the per diem allowance. In the event adequate documentation is not provided of expenses incurred during business travel, the chairman may withhold a portion or all of reimbursement requested by a traveler.

City Council Regular

Item #: J. 1.

Date: 11/02/2010

Contact: Polo Enriquez, CCEDC Executive Director

Information

SUBJECT

Presentation on Economic Development Projects by the Copperas Cove Economic Development Corporation. *Polo Enriquez, Executive Director*

BACKGROUND/HISTORY

The CCEDC, as part of its ongoing efforts to inform the City Council, its staff and the citizens of Copperas Cove, intends to, from time to time, present information on its activities.

FINDINGS/CURRENT ACTIVITY

Presentation of CCEDC Projects.

ACTION OPTIONS/RECOMMENDATION

None.

Attachments

Link: [EDC Projects Presentation](#)



Copperas Cove

Economic Development Corporation

Projects Presentation

Executive Director Polo Enriquez
Copperas Cove City Council Meeting
November 2, 2010

Stoney Brook Assisted Living Center

Construction is well underway at the Stoney Brook Assisted Living Center in the Business Park. Stoney Brook is an \$8.2 million facility with 60 living units.



Constitution Court

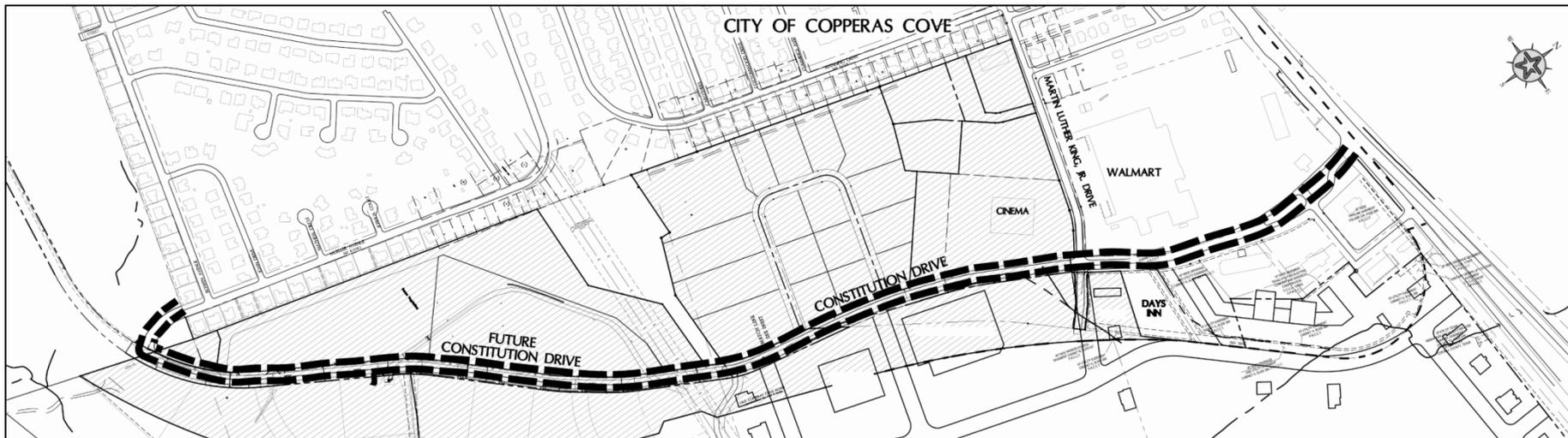


Construction has started on Constitution Court, a \$13 million multi-family residential project that will serve as a soft buffer between existing residential and future development in the Business Park.



Extension of Constitution

CCEDC has awarded a construction contract to extend Constitution Drive to connect with Mueller. This \$1.2 million construction project is expected to be complete by March 2011.

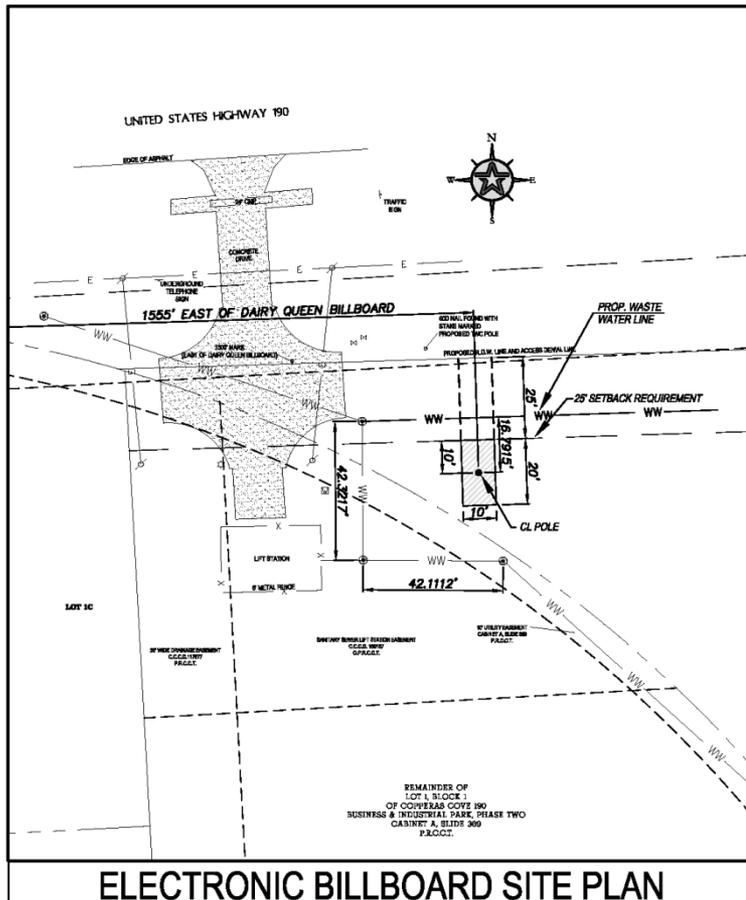


Extension of Constitution



Digital Sign

CCEDC submitted its application to TxDOT on September 27, 2010.



Shops at Five Hills



2010-2011 Projects

- Complete the extension of Constitution Drive (March 2011)
- Start to develop the remainder of CCEDC-owned property at Constitution Drive
- Complete Shops at Five Hills negotiations
- Start implementation of marketing plan for remainder of CCEDC-owned property
- Continue to support the City in its work to secure funding for the Reliever Route (Southeast Bypass)
- Create and conduct a Business Retention and Expansion Survey (mid-2011)
- Continue to address the importance of Fort Hood to Copperas Cove



Thank you for your support.

