

TO: Board Members

THROUGH: Kevin Patteson, Executive Administrator
Les Trobman, General Counsel
Jeff Walker, Deputy Executive Administrator, Water Supply & Infrastructure

FROM: Temple McKinnon, Manager, Regional Water Planning

DATE: May 6, 2015

SUBJECT: Minor Amendment to the 2011 Region C Regional Water Plan, relating to the City of Bedford and City of Fort Worth.

ACTION REQUESTED

Approve the adopted minor amendment to the 2011 Region C Regional Water Plan; and, authorize the Executive Administrator (EA) to develop the corresponding amendment to the 2012 State Water Plan, with associated public hearing, as appropriate per 31 TAC §357.51(f).

BACKGROUND

At the January 26, 2015 meeting of the Region C Regional Water Planning Group (Group), the Group approved requesting a minor amendment determination from the EA for a revision to the City of Bedford’s recommended municipal conservation water management strategy (WMS) by adding additional project detail and capital cost. This action was documented in a letter dated March 6, 2015.

The City of Bedford’s revisions to their recommended WMS include the project details and capital costs to the water loss component of the WMS. The pipeline repair/replacement and metering upgrade project to address system water losses has a firm yield of 1,687 acre-feet per year and a capital cost of \$77,308,705.

At their March 2, 2015 meeting, the Group approved requesting a minor amendment determination from the EA for a revision to the City of Fort Worth’s recommended municipal conservation WMS by adding additional project detail and capital cost. This action was documented in a letter dated March 11, 2015.

The City of Fort Worth’s revisions to their recommended WMS include the project details and capital costs to the water loss component of the WMS. The metering upgrade project to address system water losses has a firm yield of 29,345 acre-feet per year and a capital cost of \$65,282,908.

The EA made determinations (Attachment A) that revising the recommended municipal conservation WMS for the City of Bedford and the City of Fort Worth constitutes a minor amendment under 31 TAC §357.51(c), based on the amendment having met the following criteria:

1. Does not result in over-allocation of an existing or planned source of water.
2. Does not relate to a new reservoir.
3. Does not have a significant effect on instream flows, environmental flows or freshwater flows to bays and estuaries.
4. Does not have a significant substantive impact on water planning or previously adopted management strategies. This amendment simply reflects strategy details and costs not previously included in the plan.
5. Does not delete or change any legal requirements of the plan.

The EA provided written responses to the Region C Regional Water Planning Group for this minor amendment determination on March 27, 2015 and the Group adopted the minor amendment at their April 20, 2015 meeting. Following this adoption, a two-week public comment period was held and no public comments were received. No revision to the proposed minor amendment was found to be necessary by the Regional Water Planning Group.

KEY ISSUES

1. The Region C Regional Water Planning Group submitted to the Texas Water Development Board (TWDB) on May 5, 2015, the required written documentation of their adopted minor amendment, including an addendum to the current 2011 Region C Regional Water Plan (Attachment B).
2. The EA has reviewed the adopted amendment and determined that statutory and rule requirements have been met.
3. If approved, an associated amendment to the 2012 State Water Plan will be presented for the Board's consideration following a 30-day notice period and public hearing in accordance with 31 TAC §358.4 (a).

RECOMMENDATION

The Executive Administrator recommends approval of this item.

This recommendation has been reviewed by legal counsel and complies with applicable statutes and Board rules.

Les Trobman, General Counsel

Attachments:

- A. March 27, 2015 Executive Administrator Minor Amendment Determination Response Letters
- B. Minor amendment documentation, including the addendum to the 2011 Region C Regional Water Plan.

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

March 27, 2015

Ms. Jody Puckett
Region C Chair
City of Dallas Water Utility
1500 Marilla Street, Rm 4AN
Dallas, Texas 75201

Re: Region C's written request, received March 10, 2015, for a determination regarding whether or not amending the 2011 Region C Regional Water Plan to include capital costs and project detail updates for the infrastructure water loss savings component of the City of Bedford's recommended Municipal Conservation – Basic water management strategy would be a minor amendment under 31 TAC Ch. 357.51(c).

Dear Ms. Puckett:

I have reviewed Region C's request, and based on the planning group's request and revised supporting materials received March 24, 2015, have determined that revising the City of Bedford's recommended Municipal Conservation – Basic water management strategy constitutes a minor amendment under 31 TAC §357.51(c).

If Region C adopts the proposed minor amendment, the planning group will need to:

1. Provide the Texas Water Development Board (TWDB) with documentation of the Region C's action adopting this water management strategy as a minor amendment;
2. Issue and distribute an addendum to the 2011 Region C Regional Water Plan updating the plan accordingly; and,
3. Provide TWDB with corrected DB12 data to reflect all the associated changes to the 2011 Region C Regional Water Plan and the 2012 State Water Plan.

If Region C makes any substantive changes to the project components or configuration during the minor amendment process, TWDB will need to review the modified proposed amendment to ensure that the modified project still meets all of the criteria under 31 TAC §357.51(c).

Our Mission : Board Members

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

Carlos Rubinstein, Chairman | Bech Bruun, Member | Kathleen Jackson, Member
Kevin Patteson, Executive Administrator

Ms. Jody Puckett, Region C Chair
March 27, 2015
Page 2

If you have any questions concerning this approval or its associated requirements, please contact Connie Townsend, the Board's designated regional water planning project manager for this region.

Sincerely,



Kevin Patteson
Executive Administrator

cc: J. Kevin Ward, General Manager, Trinity River Authority
Connie Townsend, TWDB

Texas Water Development Board



P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

March 27, 2015

Ms. Jody Puckett
Region C Chair
City of Dallas Water Utility
1500 Marilla Street, Rm 4AN
Dallas, Texas 75201

Re: Region C's written request, received March 11, 2015, for a determination regarding whether or not amending the 2011 Region C Regional Water Plan to include capital costs and project detail updates for the infrastructure water loss savings component of the City of Fort Worth's recommended Municipal Conservation – Basic water management strategy would be a minor amendment under 31 TAC Ch. 357.51(c).

Dear Ms. Puckett:

I have reviewed Region C's request, and based on the planning group's request and revised supporting materials received March 21, 2015, have determined that revising the City of Fort Worth's recommended Municipal Conservation – Basic water management strategy constitutes a minor amendment under 31 TAC §357.51(c).

If Region C adopts the proposed minor amendment, the planning group will need to:

1. Provide the Texas Water Development Board (TWDB) with documentation of the Region C's action adopting this water management strategy as a minor amendment;
2. Issue and distribute an addendum to the 2011 Region C Regional Water Plan updating the plan accordingly; and,
3. Provide TWDB with corrected DB12 data to reflect all the associated changes to the 2011 Region C Regional Water Plan and the 2012 State Water Plan.

If Region C makes any substantive changes to the project components or configuration during the minor amendment process, TWDB will need to review the modified proposed amendment to ensure that the modified project still meets all of the criteria under 31 TAC §357.51(c).

Our Mission

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas

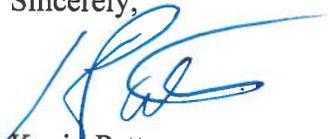
Board Members

Carlos Rubinstein, Chairman | Bech Bruun, Member | Kathleen Jackson, Member
Kevin Patteson, Executive Administrator

Ms. Jody Puckett, Region C Chair
March 27, 2015
Page 2

If you have any questions concerning this approval or its associated requirements, please contact Connie Townsend, the Board's designated regional water planning project manager for this region.

Sincerely,



Kevin Patteson
Executive Administrator

c: J. Kevin Ward, General Manager, Trinity River Authority
Connie Townsend, TWDB

REGION C WATER PLANNING GROUP

Senate Bill One Fourth Round of Regional Water Planning - Texas Water Development Board

Board Members

Jody Puckett, Chair
 Russell Laughlin, Vice-Chair
 Kevin Ward, Secretary
 David Bailey
 Bill Ceverha
 S. Frank Crumb
 Gary Douglas
 James Hotopp
 Tom Kula
 Thomas LaPoint
 Harold Latham
 G. K. Maenius
 Howard Martin
 Jim McCarter
 Steve Mundt
 Bob Riley
 Drew Satterwhite
 Gary Spicer
 Robert O. Scott
 Connie Standridge
 Jack Stevens
 Dr. Tom Woodward

May 5, 2015

Kevin Patteson
 Executive Administrator
 Texas Water Development Board
 1700 North Congress Avenue
 Austin, Texas 78701

RE: Region C Adoption of City of Bedford Minor Amendment to *2011 Region C Water Plan*

Dear Mr. Patteson:

On March 27, 2015 TWDB notified Region C of its minor amendment determination for the City of Bedford's proposed minor amendment to the *2011 Region C Water Plan*, which included a specific conservation strategy project of water main replacements and automatic meter reading (AMR) upgrades. At its meeting on April 20, 2015 the Region C Water Planning Group voted to approve and adopt Bedford's minor amendment to the *2011 Region C Water Plan*. As required, Region C published notice of this meeting 14 days in advance, with Bedford's proposed minor amendment being made available to the public on the Region C website. Public Comments were accepted at the April 20 meeting and by Region C's Political Subdivision (Trinity River Authority) prior to and for 14 days after this meeting. This public comment process has been fully documented as part of this Minor Amendment.

With this letter Region C is submitting this Minor Amendment to the *2011 Region C Water Plan* to TWDB for its consideration and adoption into the 2012 State Water Plan.

Please call me if you have any questions regarding our request.

Sincerely,



Jo M. (Jody) Puckett
 Chair, Region C Water Planning Group

C: Kevin Ward, Region C Secretary
 Connie Townsend, TWDB Project Manager
 Amy Kaarlela, Freese and Nichols, Inc.

c/o TRA
 5300 South Collins Street
 Arlington, Texas 76018
 P. O. Box 60
 Arlington, Texas 76004
 817/467-4343
 817/465-0970/Fax
 RegionCWPG@trinityra.org
 www.regioncwater.org

City of Bedford, Minor Amendment to the *2011 Region C Water Plan*

Table of Contents

1.0 Rules and Guidance	2
1.1 Texas Administrative Code 357.51(c).....	2
1.2 TWDB External Amendment Guidance dated February 2, 2014, Minor Amendment	2
2.0 Cover letter from the RWPG and Summary of the RWPG action taken	4
3.0 Evidence that the WMS for the minor amendment meets the criteria as listed in Texas Administrative Code 357.51(c)(2).....	5
4.0 Full Evaluation of the Water Management Strategy.....	6
4.1 Description	6
4.2 Evaluation.....	9
4.3 Changes to Text and Tables from the <i>2011 Region C Water Plan</i>	13
Executive Summary, Table ES.2, Total Cost of strategies	14
Chapter 4E text, page 4E.15, TRWD conservation quantity.....	15
Chapter 4E, Table 4E.4, TRWD wholesale conservation quantity.....	16
Chapter 4E, Table 4E.5, TRWD wholesale conservation quantity.....	17
Chapter 4E text, TRA, page 4E.35, Conservation quantity.....	18
Chapter 4E, Table 4E.13, TRA wholesale conservation quantity	19
Chapter 4E, Table 4E.14, TRA wholesale conservation quantity	20
Chapter 4F text, page 4F.389, Bedford write-up	21
Chapter 4F, Table 4F.306, Bedford conservation quantity	22
Chapter 4F, Table 4F.344, Bedford conservation quantity and costs.....	23
Chapter 4F, Table 4F.345, total Tarrant County conservation quantity and costs ...	24
Chapter 6, page 6.17 Description of Basic Conservation Package.....	25
Chapter 6, Description of Bedford Conservation Main Replacement Program.....	26
Chapter 6, Table 6.7, Quantity for Total Municipal Conservation Strategy.....	28
Appendix C, Table C-20, Bedford Summary Table	29
Appendix K, Section 6.6.....	30
Appendix K, Table 1.3, Summary of Cost by Municipal Conservation Strategy.....	32
Appendix Q, Table Q-10, Basic Conservation Capital Cost	33
Appendix Z, Table Z-2, Summary of Recommended Strategies Region C WUGs and WWPs.....	37
5.0 Required regional water planning database (DB12) updates	40
6.0 Adoption and Public Participation Process	46

REGION C WATER PLANNING GROUP

Senate Bill One Fourth Round of Regional Water Planning - Texas Water Development Board

Board Members

Jody Puckett, Chair
Russell Laughlin, Vice-Chair
Kevin Ward, Secretary
David Bailey
Bill Ceverha
S. Frank Crumb
Gary Douglas
James Hotopp
Tom Kula
Thomas LaPoint
Harold Latham
G. K. Maenius
Howard Martin
Jim McCarter
Steve Mundt
Bob Riley
Drew Satterwhite
Gary Spicer
Robert O. Scott
Connie Standridge
Jack Stevens
Dr. Tom Woodward

May 5, 2015

Kevin Patteson
Executive Administrator
Texas Water Development Board
1700 North Congress Avenue
Austin, Texas 78701

RE: Region C Adoption of City of Fort Worth Minor Amendment to 2011
Region C Water Plan

Dear Mr. Patteson:

On March 27, 2015 TWDB notified Region C of its minor amendment determination for the City of Fort Worth's proposed minor amendment to the *2011 Region C Water Plan*, which included a specific conservation strategy of an Advanced Meter Infrastructure (AMI) program. At its meeting on April 20, 2015 the Region C Water Planning Group voted to approve and adopt Fort Worth's minor amendment to the *2011 Region C Water Plan*. As required, Region C published notice of this meeting 14 days in advance, with Fort Worth's proposed minor amendment being made available to the public on the Region C website. Public Comments were accepted at the April 20 meeting and by Region C's Political Subdivision (Trinity River Authority) prior to and for 14 days after this meeting. This public comment process has been fully documented as part of this Minor Amendment.

With this letter Region C is submitting this Minor Amendment to the *2011 Region C Water Plan* to TWDB for its consideration and adoption into the 2012 State Water Plan.

Please call me if you have any questions regarding our request.

Sincerely,



Jo M. (Jody) Puckett
Chair, Region C Water Planning Group

C: Kevin Ward, Region C Secretary
Connie Townsend, TWDB Project Manager
Amy Kaarlela, Freese and Nichols, Inc.

c/o TRA
5300 South Collins Street
Arlington, Texas 76018
P. O. Box 60
Arlington, Texas 76004
817/467-4343
817/465-0970/Fax
RegionCWPG@trinityra.org
www.regioncwater.org

City of Fort Worth, Minor Amendment to the *2011 Region C Water Plan*

Table of Contents

1.0 Rules and Guidance	2
1.1 Texas Administrative Code 357.51(c).....	2
1.2 TWDB External Amendment Guidance dated February 2, 2014, Minor Amendment	2
2.0 Cover letter from the RWPG and Summary of the RWPG action taken	4
3.0 Evidence that the WMS for the minor amendment meets the criteria as listed in Texas Administrative Code 357.51(c)(2).....	5
4.0 Full Evaluation of the Water Management Strategy.....	6
4.1 Description	6
4.2 Evaluation.....	10
4.3 Changes to Text and Tables from the <i>2011 Region C Water Plan</i>	14
Executive Summary, Table ES.2, Total Cost of strategies	15
Chapter 4E text, page 4E.15, TRWD conservation quantity.....	16
Chapter 4E, Table 4E.4, TRWD wholesale conservation quantity.....	17
Chapter 4E, Table 4E.5, TRWD wholesale conservation quantity.....	18
Chapter 4E text, page 4E.30, Fort Worth conservation quantity.....	19
Chapter 4E, Table 4E.10, Fort Worth retail conservation quantity.....	20
Chapter 4E, Table 4E.11, Fort Worth retail basic and expanded conservation quantity and costs	21
Chapter 6, page 6.17 Description of Basic Conservation Package.....	22
Chapter 6, Description of Fort Worth’s Advanced Meter Infrastructure Program...	23
Chapter 6, Table 6.7, Quantity for Total Municipal Conservation Strategy.....	24
Appendix C, Table C-129	25
Appendix K, Section 6.7.....	26
Appendix K, Table 1.3.....	27
Appendix Q, Table Q-10, Basic Conservation Capital Cost	28
Appendix Z, Table Z-2, Summary of Recommended Strategies Region C WUGs and WWPs.....	32
5.0 Required regional water planning database (DB12) updates.....	35
6.0 Adoption and Public Participation Process	52