



## WESTMINSTER

### Staff Report

TO: The Mayor and Members of the City Council

DATE: August 19, 2010

SUBJECT: Briefing and Post-City Council Briefing Agenda for August 23, 2010

PREPARED BY: J. Brent McFall, City Manager

*Please Note: Study Sessions and Post City Council briefings are open to the public, and individuals are welcome to attend and observe. However, these briefings are not intended to be interactive with the audience, as this time is set aside for City Council to receive information, make inquiries, and provide Staff with policy direction.*

Looking ahead to Monday night's Briefing and Post-City Council meeting briefing, the following schedule has been prepared:

Dinner 6:00 P.M.

Council Briefing (*The public is welcome to attend.*) 6:30 P.M.

CITY COUNCIL MEETING 7:00 P.M.

POST BRIEFING (*The public is welcome to attend.*)

#### PRESENTATIONS

1. Proposed Water Regulations Changes to the Municipal Code
2. Proposed System Wide SCADA Communications Radio Support Structures

#### CITY COUNCIL REPORTS

1. Report from Mayor (5 minutes)
2. Reports from City Councillors (10 minutes)

#### EXECUTIVE SESSION

1. Obtain direction from City Council regarding a proposed Economic Development Incentive Agreement with the Bedrin Organization for the former Steve and Barry's space pursuant to W.M.C. 1-11-3(C)(4), W.M.C. 1-11-3(C)(7) and CRS 24-6-402(4)(e)
2. Discuss strategy and progress on negotiations related to the Westminster Urban Reinvestment Project and provide instructions to the City's negotiators as authorized by W.M.C. 1-11-3(C)(4), W.M.C. 1-11-3(C)(7) and C.R.S. 24-6-402(4)(e) (*Verbal*)

#### INFORMATION ONLY

1. Monthly Residential Development Report (Attachment)

Items may come up between now and Monday night. City Council will be apprised of any changes to the post-briefing schedule.

Respectfully submitted,

J. Brent McFall  
City Manager



WESTMINSTER

## Staff Report

City Council Post-Meeting  
August 23, 2010



**SUBJECT:** Proposed Water Regulations Changes to the Municipal Code

**PREPARED BY:** Josh Nims, Water Resources Engineering Coordinator  
Stu Feinglas, Water Resources Analyst

### **Recommended City Council Action:**

Provide direction to Staff to prepare an Ordinance to adjust the Municipal Code to reflect changes to the City's Water Regulations.

### **Summary Statement:**

- The proposed Westminster Municipal Code (Code) revisions clarify or modify existing regulations and, in some cases, establish new regulations related to water tap permits and fees, water rate schedule, and waste of water.
- These modifications are recommended to address a variety of issues that in the past have caused problems for builders, homeowners and the City.
- This Staff Report describes the policy level changes that are recommended by Staff.
- With direction from Council, Staff will bring this item forward for official adoption at a subsequent City Council meeting.
- Staff will be in attendance on Monday night to answer questions regarding these issues.

**Expenditure Required:** \$ 0

**Source of Funds:** N/A

**Policy Issue:**

Should City Council direct staff to modify the Municipal Code to clarify or modify existing regulations and in some cases, establish new regulations related to water tap permits and fees, water rate schedule and waste of water?

**Alternative:**

City Council may opt not to support the proposed changes to Chapter 7 of Title VIII of the Westminster Municipal Code regarding water regulations. This alternative is not recommended because the City will be susceptible to under-collection of fees and rates, certain customers may pay more in fees and rates than otherwise required, and the City will allow inefficient and out-of-date water-based cooling systems to continue to be installed.

City Council may select only certain changes for approval. This alternative is not recommended because all proposed modifications resolve existing issues or inequities in the current Code.

**Background Information:**

**Modifications to Chapter 7- Water Regulations**

Staff proposes modifying the water Code to add and clarify existing language, update fee and rate structures to reflect existing City policies, resolve inconsistencies with the City's Landscape Regulations and to add policy to address areas of need. Proposed modifications that require a change in policy or the implementation of new policy are summarized below.

**8-7-2: Tap Permit Required**

**8-7-2(C):** *Staff proposes that payment of the water tap fee be made when a building permit is issued.* Currently, City Code allows payment of a water tap no earlier than the date upon which the building permit is issued and no later than the date of the water meter installation. This extended payment timeframe has raised issues when a meter has been installed prior to payment, when a builder did not have sufficient funds to pay the fee, and when a closing has occurred without a certificate of occupancy. Although payment of the fee is a prerequisite to the issuance of a certificate of occupancy, there have been occasions when a meter has been installed without the payment, resulting in difficulties to all parties. These cases could allow for a time period in which the home or building may be sold, leaving the new owner responsible for paying the outstanding fee. Requiring the tap fee to be paid at the time the building permit is issued resolves these potential issues and eliminates the potential for a property to be sold without payment of a water tap fee. Several Front Range cities require a tap fee to be paid at the time of the building permit issuance, including Brighton, Broomfield, Colorado Springs, Denver, Erie, Fort Collins, Golden, Lafayette, Longmont and Louisville. Staff intends to notify the Colorado Association of Home Builders of this change if directed to modify Code.

### **8-7-3: Water Tap Fees and Credits**

**8-7-3(D)(1):** *Staff proposes amending the Code to require a separate irrigation water tap for all non-residential properties.* Currently, non-residential properties irrigating less than 40,000 square feet are allowed to supply their irrigation system with water from the building tap. This is not beneficial to customers as it often increases the tap size requirement of the building tap and can increase the sewer tap fee that is based on the size of the water tap. While customers will have an additional cost to install a separate tap and meter for irrigation, studies have shown that paying for irrigation separately from the building water use is an effective way for customers to identify potential savings from minimizing irrigation water use and maintaining irrigation systems. The proposed amendment will require all new non-residential irrigation systems to be connected to a separate irrigation water tap. This change will have no impact on the water tap fee.

**8-7-3(D)(4):** *Staff proposes modifying the landscape types into high, medium and low categories for determining the irrigation tap fee.* Irrigation tap fees are determined based on the amount of water required by the landscape. The landscape types in current code have only two categories: “standard” and “low.” “Standard” landscaping requires an annual application of more than 10 gallons of water per square foot and “low” requires an annual application of up to 10 gallons of water per square foot.

The proposed modification would create three landscape types: “high,” “medium,” and “low.” The “high” water landscaping designation would replace “standard” and would apply to landscapes that require more than 10 gallons of water per square foot per year. The “medium” water landscaping designation would apply for landscapes that require 3 to 10 gallons of water per square foot per year. A new “low” water landscape type would be added and would apply to landscapes that require up to 3 gallons per square foot per year. This revision will make the Code consistent with the landscape types described in the City’s Landscape Regulations and will allow customers who install low water demand landscapes to pay a significantly lower (approximately 50%) tap fee than if they had chosen medium or high water demand landscapes.

### **8-7-7: Water Rate Schedule**

**8-7-7(G):** *Staff proposes to clarify Code to require that out-of-city customers pay a 25% surcharge on rates and fees.* The City has historically charged a 25% surcharge on out-of-city customers based on individual contracts. This policy would now be reflected in the Code. City water customers subject to existing contracts, such as customers in Shaw Heights, will not be affected by the Code modifications.

### **8-7-25: Waste of Water**

**8-7-25(A):** *Staff proposes including single pass cooling systems as a recognized waste of water.* Current Code allows single pass cooling systems that use water to cool the condenser coils of air conditioning and refrigeration units. These systems use the water one time only and then send the discharge into the sanitary sewer system, which is not an efficient use of water. Current technology is readily available that circulates the warmed water through a type of radiator where the heat is extracted and the water can then be re-circulated in a continuing cycle. In addition, there are also efficient air-based cooling technologies available in the market. Other water providers such as Denver Water have disallowed single pass cooling.

The proposed amendment will not allow single pass cooling systems to be installed in new construction. There would be no impact to current single pass cooling system users until they replace their current outdated equipment. Evaporative coolers or cooling towers are not considered to be single pass cooling systems.

The proposed modifications to the Code support the City's goals of a Financially Sustainable City Government Providing Exceptional Services and a Safe and Secure Community.

Respectfully submitted,

J. Brent McFall  
City Manager



## Staff Report

City Council Post Meeting  
August 23, 2010



**SUBJECT:** Proposed System Wide SCADA Communications Radio Support Structures

**PREPARED BY:** Stephanie Bleiker, Project Engineer  
Steve Grooters, Senior Projects Engineer  
Russ Bowers, Public Safety Communications Administrator  
Nelson Martinez, Public Safety Technical Coordinator

### Recommended City Council Action:

Staff is requesting Council's direction regarding the design and construction of radio antenna support structures associated with the Public Safety Radio Communication Improvements Project and Utility Engineering Supervisory Control and Data Acquisition (SCADA) Communications Improvements Capital Project.

### Summary Statement:

- The City's Supervisory Control and Data Acquisition (SCADA) system is a computerized system that functions as the City's eyes and ears for monitoring and operating remote utility facilities.
- Facilities operated through SCADA are located throughout Westminster and beyond City limits and include treatment plants, water tanks, pump stations and wastewater lift stations. The SCADA system monitors equipment, checks security, and controls equipment; and in the case of equipment failures, SCADA provides critical information to Operations Staff to provide appropriate and immediate response.
- Currently, vulnerabilities exist in the SCADA communications that could result in either lost or reduced communications with key remote facilities. Other limitations associated with the current system include inadequate data transfer capabilities.
- The SCADA System Communications Enhancements Project was approved by Council in November 2009 to address current system issues. Overall improvements associated with this project included fiber optic systems, water treatment facility communications and radio systems.
- Concurrent with the SCADA Enhancements capital project, Public Safety has needs to overcome existing communication radio blind spots in south Westminster. The departments' collaborative effort provides Public Safety with a location to mount their antennas.
- Staff evaluated multiple alternatives to provide the necessary upgrades to improve both Public Safety and Utility SCADA vulnerabilities while remaining sensitive to neighborhood impacts.
- The recommended alternatives involve installation of new radio equipment at two field station locations based upon desirable site characteristics: the Gregory Hill water tank site and the Sunset Ridge water tank site.

**Expenditure Required:** \$712,000 (approved by Council on 11/23/2009, item 8H))

**Source of Funds:** Utility Fund - System-wide SCADA Enhancement Project

**Policy Issue:**

Should City Council direct Staff to proceed with the design and construction of the radio support structures at the Sunset Ridge and Gregory Hill water tank sites?

**Alternatives:**

1. City Council could choose to delay the improvements until some future date. Staff does not recommend this alternative because improvements are critical for both Public Safety and Utility operations. In addition, construction costs are presently very competitive and may increase in the future.
2. City Council could choose to select a different alternative at one or more of the two radio improvements sites. Staff believes that the improvements recommended at these sites meet the demands of the City's infrastructure while balancing cost, aesthetics and neighborhood considerations.
3. City Council could choose to not perform the improvements. Staff does not recommend this alternative as these improvements are essential where communication blind spots currently exist. Additionally, not completing these improvements will maintain the current situation of relatively high vulnerability.

**Background Information:**

The City's SCADA system functions as the City's eyes and ears for monitoring 25 field station facilities located throughout Westminster and beyond City limits. The SCADA system allows Utilities Operations Staff to maintain field station operations remotely, 24-hours a day, from the operations control room located at Semper Water Treatment Facility. The City's communications equipment provides the link between the various field stations back to the Utilities Operations Staff at the Semper Water Treatment Facility.

In 2007, the Public Works and Utilities Department initiated the SCADA project that provided Staff with an assessment of the existing system and a preliminary design report for planning future phased improvements. In line with the preliminary design report, the City's SCADA system improvements were initiated in 2008 with a project that integrated Information Technology and Public Safety Staff in the design and construction process. These improvements provided enhanced monitoring and control to existing SCADA sites and new field station locations.

In November 2009, the second phase of improvements was approved by City Council. These improvements are currently in progress and were initiated to address the radio, fiber optic and water treatment facility communications that link field stations back to Utilities Operations Staff.

The existing communications system supporting the link between field stations and Semper Water Treatment Facility has some critical vulnerabilities. These were documented in the 2007 SCADA assessment report and included issues such as having single points of failure. System downtimes resulting from these vulnerabilities continue to be experienced by City Operations Staff and impact

Westminster residents. Having a system with single points of failure has resulted in longer response times and increased damage to equipment and surrounding property. Single points of failure can also cause communications to breakdown at several field stations simultaneously. Additional shortcomings of the existing system are insufficient data transfer capacity and physical obstructions and interference with radio signals from some field stations.

In order to correct these communications vulnerabilities, two field station sites have been identified for communications structures upgrades. These sites include the Sunset Ridge water tank and the Gregory Hill water tank. Installing new dish and panel antennas at these sites allows SCADA information from several field stations to be transmitted back to the Semper Water Treatment Facility through more than one route. This redundancy eliminates current single points of failure and enhances system reliability. In addition, the new equipment will be sized to handle current and future needs for data transfer capacity. Finally, the location of this equipment will address the blind spots that the Public Safety radio system is experiencing.

The specific equipment type and layout varies with each location and will be described in detail using an electronic presentation to City Council. At the Sunset Ridge site, new antennas would be mounted directly to the water tank's support legs and painted to match the tank structure. In a similar way, equipment at the Gregory Hill site would be direct-mounted to the water tanks. These techniques will help to minimize the appearance of the new equipment on the tanks. An additional site located in the Standley Lake area is experiencing similar vulnerabilities and may require similar equipment. The need for future equipment in the Standley Lake area is not yet confirmed, but may include a new aesthetic/stealth-style tower and/or a repeater antenna near the valve shaft house.

A key advantage to construction at the Gregory Hill site is the ability to simultaneously combine necessary improvements to Public Safety radio coverage in South Westminster. This site is located on a ridge that provides excellent radio communications throughout the City. In particular, this site permits radio coverage in the southern portions of the City – an area in which Public Safety currently experiences significant communication gaps. Staff identified and evaluated several alternative antenna support structures that could best meet both the communication needs of the Utility and Public Safety as well as neighbor concerns about structure aesthetics. Staff is sensitive to residents' concerns about the effect that installing this infrastructure will have on the neighborhood's appearance. Results indicate tank mounted antenna could best address the Utility and Public Safety communications needs, while maintaining a minimal presence in the neighborhood. The support structure would be installed on the top center portion of the west tank and mounted with approximately six or eight small antennas. Two dish antennas and one panel antenna would be mounted on the peripheral rim of the tanks facing north to northwest.

Throughout the process of upgrading the SCADA system, Staff has integrated Information Technology Staff and Public Safety Staff to incorporate the broader needs of the City into the project, which has led to economized solutions for the City. These improvements are necessary and warrant action; therefore, Staff recommends moving forward with final design and construction of the antenna support structures at the Sunset Ridge and Gregory Hill water tank sites with consideration for a potential future phase in the Standley Lake area. Any potential future Standley Lake improvements have yet to be fully identified. Staff will work internally to develop interim solutions to address immediate needs and may return to Council in the future to discuss long term solutions to these communication improvements.

This project achieves the City Council's Strategic Plan Goal of a Financially Sustainable City Government and a Safe and Secure Community through well-maintained infrastructure and providing efficient, cost-effective internal and external services.

Respectfully submitted,

J. Brent McFall  
City Manager



Staff Report

Information Only Staff Report  
August 23, 2010



SUBJECT: Monthly Residential Development Report

PREPARED BY: Walter G. Patrick, Planner I

Summary Statement:

This report is for City Council information only and requires no action by City Council.

- The following report updates 2010 residential development activity per subdivision (please see attachment) and compares 2010 year-to-date totals with 2009 year-to-date figures.
- The table below shows an overall increase (570.6%) in new residential construction for 2010 year-to-date when compared to 2009 year-to-date totals (114 units in 2010 vs. 17 units in 2009).
- Residential development activity in July 2010 reflects a 50% decrease in single-family detached (1 unit in July 2010 versus 2 units in July 2009), an increase in single-family attached (8 units in July 2010 versus 0 units in July 2009), and no change in multi-family or senior housing (0 units in both years).

**NEW RESIDENTIAL UNITS (2009 AND 2010)**

| UNIT TYPE              | JULY     |          | <u>%<br/>CHG.</u> | YEAR-TO-DATE |            | <u>%<br/>CHG.</u> |
|------------------------|----------|----------|-------------------|--------------|------------|-------------------|
|                        | 2009     | 2010     |                   | 2009         | 2010       |                   |
| Single-Family Detached | 2        | 1        | -50.0             | 16           | 18         | 12.5              |
| Single-Family Attached | 0        | 8        |                   | 1            | 19         | 1800.0            |
| Multiple-Family        | 0        | 0        |                   | 0            | 0          |                   |
| Senior Housing         | 0        | 0        |                   | 0            | 77         |                   |
| <b>TOTAL</b>           | <b>2</b> | <b>9</b> | <b>350.0</b>      | <b>17</b>    | <b>114</b> | <b>570.6</b>      |

**Background Information:**

In July 2010 there were 9 new service commitments issued for new housing units.

The column labeled “# Rem.” on the attached table shows the number of approved units remaining to be built in each subdivision.

Total numbers in this column increase as new residential projects (awarded service commitments in the new residential competitions), Legacy Ridge projects, build-out developments, etc. receive Official Development Plan (ODP) approval and are added to the list.

Respectfully submitted,

J. Brent McFall  
City Manager

Attachment

**ACTIVE RESIDENTIAL DEVELOPMENT**

**Single-Family Detached Projects:**

Bradburn (120th & Tennyson)  
 CedarBridge (111th & Bryant)  
 Country Club Highlands (120th & Zuni)  
 Countryside Vista (105th & Simms)  
 Huntington Trails (144th & Huron)  
 Hyland Village (96th & Sheridan)  
 Legacy Ridge West (104th & Leg. Ridge Pky.)  
 Lexington (140th & Huron)  
 Meadow View (107th & Simms)  
 Park Place (95th & Westminster Blvd.)  
 Ranch Reserve (114th & Federal)  
 Savory Farm Estates (109th & Federal Blvd.)  
 South Westminster (Shoenberg Farms)  
 Various Infill  
 Winters Property (111th & Wads. Blvd.)  
 Winters Property South (110th & Wads. Blvd.)

***SUBTOTAL***

**Single-Family Attached Projects:**

Alpine Vista (88th & Lowell)  
 Bradburn (120th & Tennyson)  
 CedarBridge (111th & Bryant)  
 Cottonwood Village (88th & Federal)  
 East Bradburn (120th & Lowell)  
 Eliot Street Duplexes (104th & Eliot)  
 Highlands at Westbury (112th & Pecos)  
 Hollypark (96th & Federal)  
 Hyland Village (96th & Sheridan)  
 Legacy Village (113th & Sheridan)  
 South Westminster (East Bay)  
 South Westminster (Shoenberg Farms)  
 Summit Pointe (W. of Zuni at 82nd Pl.)  
 Sunstream (93rd & Lark Bunting)

***SUBTOTAL***

**Multiple-Family Projects:**

Bradburn (120th & Tennyson)  
 Hyland Village (96th & Sheridan)  
 Mountain Vista Village (87th & Yukon)  
 Prospector's Point (87th & Decatur)  
 South Westminster (East Bay)  
 South Westminster (Harris Park Sites I-IV)

***SUBTOTAL***

**Senior Housing Projects:**

Covenant Retirement Village  
 Crystal Lakes (San Marino)  
 Legacy Ridge (112th & Federal)

***SUBTOTAL***

**TOTAL (all housing types)**

| <b>Jun-10</b> | <b>Jul-10</b> | <b>2009 YTD</b> | <b>2010 YTD</b> | <b># Rem.*</b> | <b>2009 Total</b> |
|---------------|---------------|-----------------|-----------------|----------------|-------------------|
| 1             | 0             | 9               | 5               | 46             | 11                |
| 0             | 0             | 0               | 1               | 3              | 0                 |
| 1             | 0             | 0               | 1               | 98             | 0                 |
| 0             | 0             | 0               | 0               | 9              | 0                 |
| 2             | 0             | 2               | 8               | 119            | 4                 |
| 0             | 0             | 0               | 0               | 107            | 0                 |
| 0             | 0             | 1               | 0               | 4              | 1                 |
| 0             | 0             | 1               | 0               | 3              | 1                 |
| 0             | 0             | 0               | 1               | 0              | 1                 |
| 0             | 1             | 0               | 1               | 39             | 0                 |
| 0             | 0             | 0               | 0               | 0              | 0                 |
| 0             | 0             | 0               | 0               | 24             | 0                 |
| 0             | 0             | 0               | 0               | 47             | 0                 |
| 0             | 0             | 3               | 1               | 2              | 4                 |
| 0             | 0             | 0               | 0               | 8              | 0                 |
| 0             | 0             | 0               | 0               | 10             | 0                 |
| <b>4</b>      | <b>1</b>      | <b>16</b>       | <b>18</b>       | <b>519</b>     | <b>22</b>         |
| 0             | 0             | 0               | 0               | 84             | 0                 |
| 0             | 0             | 0               | 0               | 0              | 0                 |
| 0             | 0             | 0               | 0               | 0              | 0                 |
| 0             | 0             | 0               | 0               | 62             | 0                 |
| 0             | 0             | 0               | 0               | 117            | 0                 |
| 0             | 0             | 0               | 0               | 10             | 0                 |
| 0             | 0             | 0               | 9               | 0              | 9                 |
| 0             | 0             | 0               | 0               | 20             | 0                 |
| 0             | 0             | 0               | 0               | 153            | 0                 |
| 0             | 8             | 0               | 8               | 54             | 0                 |
| 0             | 0             | 0               | 0               | 58             | 0                 |
| 0             | 0             | 0               | 0               | 54             | 0                 |
| 0             | 0             | 0               | 0               | 58             | 0                 |
| 1             | 0             | 1               | 2               | 14             | 2                 |
| <b>1</b>      | <b>8</b>      | <b>1</b>        | <b>19</b>       | <b>684</b>     | <b>11</b>         |
| 0             | 0             | 0               | 0               | 233            | 0                 |
| 0             | 0             | 0               | 0               | 54             | 0                 |
| 0             | 0             | 0               | 0               | 144            | 0                 |
| 0             | 0             | 0               | 0               | 24             | 0                 |
| 0             | 0             | 0               | 0               | 28             | 1                 |
| 0             | 0             | 0               | 0               | 6              | 6                 |
| <b>0</b>      | <b>0</b>      | <b>0</b>        | <b>0</b>        | <b>489</b>     | <b>7</b>          |
| 0             | 0             | 0               | 0               | 0              | 0                 |
| 0             | 0             | 0               | 0               | 7              | 0                 |
| 0             | 0             | 0               | 77              | 91             | 0                 |
| <b>0</b>      | <b>0</b>      | <b>0</b>        | <b>77</b>       | <b>98</b>      | <b>0</b>          |
| <b>5</b>      | <b>9</b>      | <b>17</b>       | <b>114</b>      | <b>1790</b>    | <b>40</b>         |

\* This column refers to the number of approved units remaining to be built in each subdivision.