



## SYRACUSE CITY

### Syracuse City Council Work Session Notice

June 25, 2013 – 6:00 p.m.  
Municipal Building, 1979 W. 1900 S.

Notice is hereby given that the Syracuse City Council will meet in a work session on Tuesday, June 25, 2013, at 6:00 p.m. in the large conference room of the Municipal Building, 1979 W. 1900 S., Syracuse City, Davis County, Utah. The purpose of the work session is to discuss/review the following items:

- a. Public comments.
- b. Discussion regarding the equestrian park.
- c. Discussion regarding updating and amending the consolidated fee schedule, which includes proposed changes to the utility rate structure.
- d. Discussion regarding culinary water rates.
- e. Discussion regarding fireworks.
- f. Discussion regarding agenda item 3, recommendation of Award of Contract for Marilyn Drive Road Improvement Project.
- g. Council business.

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In compliance with the Americans Disabilities Act, persons needing auxiliary communicative aids and services for this meeting should contact the City Offices at 801-825-1477 at least 48 hours in advance of the meeting.

#### **CERTIFICATE OF POSTING**

The undersigned, duly appointed City Recorder, does hereby certify that the above notice and agenda was posted within the Syracuse City limits on this 20<sup>th</sup> day of June, 2013 at Syracuse City Hall on the City Hall Notice Board and at <http://www.syracuseut.com/>. A copy was also provided to the Standard-Examiner on June 20, 2013.

CASSIE Z. BROWN, CMC  
SYRACUSE CITY RECORDER



# COUNCIL AGENDA

June 25, 2013

Agenda Item #b                      Discussion regarding the Syracuse Posse Arena.  
(min.)

## *Factual Summation*

- Please see the requests sent by members of the Syracuse Posse regarding their concerns with the arena. In the June 11, 2013 Business Meeting a member of the Syracuse Posse spoke during public comment and it was decided that there should be an informal discussion about this during the next Work Session.

**From:** "[Randymecham@hotmail.com](mailto:Randymecham@hotmail.com)" <[Randymecham@hotmail.com](mailto:Randymecham@hotmail.com)>

**Date:** June 6, 2013, 11:26:30 PM MDT

**To:** City Council Members <[CityCouncilMembers@syracuseut.com](mailto:CityCouncilMembers@syracuseut.com)>

**Subject:** Form submitted: [Contact City Council] in portal [Syracuse City]

**Reply-To:** "[Randymecham@hotmail.com](mailto:Randymecham@hotmail.com)" <[Randymecham@hotmail.com](mailto:Randymecham@hotmail.com)>

Name: Randy Mecham

Email Address: [Randymecham@hotmail.com](mailto:Randymecham@hotmail.com)

Address:

Subject: Syracuse posse arena

Comment: Hello from Randy Mecham

I wanted to express my concern with the city response to Syracuse posse needs. We as a posse have been in need of the city's help with the Syracuse arena. We use this at least once or twice a week. We have our two young girls in posse with other kids there age. This posse is growing. We all donate money and time to keep the arena grounds usable, but there are so many things we don't have. Like a bathroom, also sprinklers for the arena. These are just two examples of things we need and would hope the city counsel would care about our kids and the quality of our city and the people that make it our home town. I would hope the city could see these kids are honor students and class officers that need the city's help with making Syracuse a better place. The future of our children and children's children would be able to remember the heritage that has been past down for generations. This heritage is at risk without the support of our leaders. I know this is a expense but we really could just use some donated items that would help us feel like we could compare to other city's I am willing to donate my time and talents to make it a better place. We just need someone anyone to support our kids. This isn't asking much since donations of different items could make the arena more comparable to other city's. I would commend you for your effort to help by suggesting the city manager could talk with posse members. we meet every Thursday night at 6 pm. Till 9 pm. I hope this message finds counsel members. Please help save our heritage. Thanks for taking the time to here our concern. Thank you Randy Mecham.

**From:** "[Newman2jun@gmail.com](mailto:Newman2jun@gmail.com)" <[Newman2jun@gmail.com](mailto:Newman2jun@gmail.com)>  
**Date:** June 6, 2013, 9:28:53 PM MDT  
**To:** City Council Members <[CityCouncilMembers@syracuseut.com](mailto:CityCouncilMembers@syracuseut.com)>  
**Subject: Form submitted: [Contact City Council] in portal [Syracuse City]**  
**Reply-To:** "[Newman2jun@gmail.com](mailto:Newman2jun@gmail.com)" <[Newman2jun@gmail.com](mailto:Newman2jun@gmail.com)>

Name: James Newmant

Email [Newman2jun@gmail.com](mailto:Newman2jun@gmail.com)

Address:

Subject: Syracuse posse

Comment: This is James Newman

We use the Syracuse posse grounds twice a week I brought sprinklers over here to help keep the dust down And it don't seem like there's very much water pressure I was just wondering who we would contact to help us out on some water pressure I've been over to the Hooper arena and they have really good water pressure And they have Lights so I can ride After Dark And restrooms Over here I have to use the bathroom in my horse trailer I've noticed on Thursday there's a bunch of kids that come riding over there I like coming over here because it's about 2 miles closer to my house Can you please let me know who to contact About this place



# COUNCIL AGENDA

June 25, 2013

Agenda Item #c                      Discussion regarding updating and amending the consolidated fee schedule, which includes proposed changes to the utility rate structure.

***Factual Summation***

- Any questions regarding this agenda item may be directed at Finance Director Stephen Marshall.
- On June 11, 2013, the Council voted for the proposed minor adjustments to the fee schedule, but needed to discuss the proposed changes to the City's Utility Rate increases. Attached are the Utility Rate Discussion and Utility Rate Comparison items that were presented at the June 11 meeting.



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# Utility Rate Review

**Stephen Marshall**  
**Finance Director**



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# UTILITY RATES

- We have a responsibility as a city to charge rates for utilities that are reasonable, responsible, and that only cover the costs of our expenses.
- We have not adjusted utility rates for at least three years with the exception of the rate charged by North Davis Sewer District.
- Costs during this 3 year period have increased.



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# UTILITY RATES

- Utility rates can be broken down into operational costs and capital costs.
- Operational costs are those costs that are incurred to provide the utility service (i.e. salaries, wages, disposal fees, water purchase, equipment, supplies, etc.)
- Capital Costs are those costs incurred to repair, maintain, and improve our infrastructure system that delivers the utility to our homes and businesses.



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# UTILITY RATES

- Capital costs for infrastructure repairs, maintenance, and improvement projects is our biggest issue when talking about utility rates.
- The costs of repairing, maintaining, and improving our infrastructure is charged as an expense to each utility in the form of depreciation expense.
- It is charged as an estimated cost over 40-50 years. This is an estimate of the useful life of the infrastructure.



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# UTILITY RATES

- If the City calculates into the utility rate the cost of the depreciation expense for infrastructure, then the City will have money now and in the future to repair, maintain, and improve our infrastructure.
- If we don't fund depreciation expense, then eventually the City will have no money to fund improvement projects and will have to Bond to complete the repairs, maintenance, and improvements to our infrastructure.
- Rates would then have to increase to fund the bond and the City would pay interest costs as well.



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# UTILITY RATES

- Currently the City is NOT completely funding the depreciation expense in the secondary water fund, storm water fund, sewer fund, and now in the Culinary Fund.
- Currently shortage of funding for depreciation expense in each fund:
  - Secondary Water = Shortage of \$267,938.
  - Storm Water = Shortage of \$275,025.
  - Sewer Fund = Shortage of \$75,697.
  - Culinary Fund = Shortage of \$69,896.
  - Garbage Fund = Surplus of 44,951.
  - Street Lights = No shortage or surplus.
  - Parks Maintenance = No shortage or surplus.



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# UTILITY RATES - DEPRECIATION

|                              | <u>Secondary</u>  | <u>Storm</u>      | <u>Culinary</u>     | <u>Sewer</u>        | <u>Garbage</u>    |
|------------------------------|-------------------|-------------------|---------------------|---------------------|-------------------|
| Cash Balance                 | \$ -              | \$ 242,889        | \$ 1,527,972        | \$ 833,000          | \$ 315,000        |
| Use of Retained Earnings     | \$ (267,938)      | \$ (275,025)      | \$ (69,896)         | \$ (75,697)         | \$ 44,951         |
| Depreciation                 | \$ 460,000        | \$ 215,000        | \$ 510,000          | \$ 295,000          | \$ -              |
| Cash Balance Available       | <u>\$ 192,062</u> | <u>\$ 182,864</u> | <u>\$ 1,968,076</u> | <u>\$ 1,052,303</u> | <u>\$ 359,951</u> |
| Capital Projects             | \$ -              | \$ (78,000)       | \$ (400,000)        | \$ (300,000)        | \$ -              |
| Capital Assets               | \$ (65,000)       | \$ -              | \$ (65,000)         | \$ -                | \$ -              |
| Ending Cash Balance          | <u>\$ 127,062</u> | <u>\$ 104,864</u> | <u>\$ 1,503,076</u> | <u>\$ 752,303</u>   | <u>\$ 359,951</u> |
| Net Depr over use of balance | \$ 192,062        | \$ (60,025)       | \$ 440,104          | \$ 219,303          | \$ 44,951         |



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# No Rate Increase

## Cash Flow & Capital Projects:

|                         | <u>Secondary</u> | <u>Storm</u> | <u>Culinary</u> | <u>Sewer</u> |
|-------------------------|------------------|--------------|-----------------|--------------|
| Cash Balance - 7/1/2013 | \$ -             | \$ 242,889   | \$ 1,527,972    | \$ 833,000   |
| Cash Addition - FY2014  | \$ 127,062       | \$ (138,025) | \$ (65,096)     | \$ (75,697)  |
| Cash Addition - FY2015  | \$ 192,062       | \$ (60,025)  | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2016  | \$ 192,062       | \$ (60,025)  | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2017  | \$ 192,062       | \$ (60,025)  | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2018  | \$ 192,062       | \$ (60,025)  | \$ 440,104      | \$ 219,303   |
| Cash Balance Available  | \$ 895,310       | \$ (135,236) | \$ 3,223,292    | \$ 1,634,515 |

### Future Capital Projects\*\*

|                         |            |            |              |      |
|-------------------------|------------|------------|--------------|------|
| Smedley Acres           | \$ 538,000 | \$ 117,000 | \$ 651,000   |      |
| 1250 West Street        |            | \$ 398,000 | \$ 630,000   |      |
| Melanie Lane            |            |            | \$ 334,000   |      |
| 2175 Culinary Waterline |            |            | \$ 41,000    |      |
| Total Capital Assets    | \$ 538,000 | \$ 515,000 | \$ 1,656,000 | \$ - |

|                     |            |              |              |              |
|---------------------|------------|--------------|--------------|--------------|
| Ending Cash Balance | \$ 357,310 | \$ (650,236) | \$ 1,567,292 | \$ 1,634,515 |
|---------------------|------------|--------------|--------------|--------------|

\*\* This is not an all inclusive list. It is only a sample of capital projects with needed repair.



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# UTILITY RATES

- In order to fully fund the depreciation expense for each of these funds rates would need to be increased.
- Secondary water = \$3.30/household per month
- Storm water = \$3.35/household per month
- Culinary water = \$0.70/household per month
- Sewer Fund = \$0.90/household per month
- North Davis Sewer District is also raising its rate by \$1.50 in July 2013.
- Rates could be reduced in garbage by \$0.55/household per month.
- **Total Rate increase needed of \$9.20/household per month**



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# UTILITY RATES

- North Davis Sewer District has approved rate increases of \$1.50 each year for the next three fiscal years.
  - **Fiscal Year 2013-2014 = \$1.50 / per month per user**
  - **Fiscal Year 2014-2015 = \$1.50 / per month per user**
  - **Fiscal Year 2015-2016 = \$1.50 / per month per user**



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# UTILITY RATES

- I have compiled a benchmark of 9 other cities utility rates for comparison purposes.
- **This document is included in your dropbox.**
- Syracuse City has the 3<sup>rd</sup> cheapest rates out of 10 cities.
- Even if the City increased rates by \$12.15 per month ( $\$3.3+3.35+0.70+0.90+4.5-0.55$ ) to \$76.20 per month we would have the 4<sup>th</sup> cheapest rates out of 10 cities.



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# UTILITY RATES - COMPARISON

| City             | Total Bill @ 8,000 GAL | Notes                               |
|------------------|------------------------|-------------------------------------|
| ROY CITY         | <b>\$63.28</b>         | Basic                               |
| CLINTON CITY     | <b>\$63.56</b>         | Basic                               |
| SYRACUSE CITY    | <b>\$64.05</b>         | Basic                               |
| LAYTON CITY      | <b>\$68.07</b>         | INCLUDING AN ESTIMATE FOR SEC WATER |
| FARMINGTON CITY  | <b>\$77.43</b>         | BENCHLAND SECONDARY                 |
| FARMINGTON CITY  | <b>\$89.93</b>         | WEBER BASIN - SECONDARY             |
| CLEARFIELD CITY  | <b>\$80.69</b>         | INCLUDING AN ESTIMATE FOR SEC WATER |
| KAYSVILLE CITY   | <b>\$81.75</b>         | Basic                               |
| WEST POINT       | <b>\$82.65</b>         | Basic                               |
| NORTH ODGEN CITY | <b>\$83.96</b>         | Basic                               |
| SARATOGA SPRINGS | <b>\$102.35</b>        | Basic                               |
| AVERAGE RATE     | <b>\$77.97</b>         |                                     |



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# UTILITY RATES

- Recommendation to adjust utility rates to fully fund depreciation expense.
- Long-term = better financial plan.
- Rates would still be very competitive with surrounding cities. These other cities have recognized the need to fund their infrastructure costs.



# UTILITY RATES

- Options to adjust utility rates to recommended levels:
  - All at once (Not Recommended)
  - In step increases over 3 years
  - In step increases over 4 years
  - In step increases over 5 years
- Increase rates in funds that have lowest cash balances first: Secondary Fund & Storm Fund



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# UTILITY RATES

## Rate Increase Options Summary:

|                       | <u>3-Year Option</u> |             | <u>4-Year Option</u> |             | <u>5-Year Option</u> |             |
|-----------------------|----------------------|-------------|----------------------|-------------|----------------------|-------------|
|                       | <u>Syracuse</u>      | <u>NDSD</u> | <u>Syracuse</u>      | <u>NDSD</u> | <u>Syracuse</u>      | <u>NDSD</u> |
| <b>FY 2013-2014</b>   | \$2.75               | \$1.50      | \$2.00               | \$1.50      | \$1.65               | \$1.50      |
| <b>FY 2014-2015</b>   | \$2.50               | \$1.50      | \$2.00               | \$1.50      | \$1.50               | \$1.50      |
| <b>FY 2015-2016</b>   | \$2.40               | \$1.50      | \$2.05               | \$1.50      | \$1.50               | \$1.50      |
| <b>FY 2016-2017</b>   |                      |             | \$1.60               |             | \$1.40               |             |
| <b>FY 2017-2018</b>   |                      |             |                      |             | \$1.60               |             |
|                       | \$7.65               | \$4.50      | \$7.65               | \$4.50      | \$7.65               | \$4.50      |
| <b>Total Increase</b> | <b>\$12.15</b>       |             | <b>\$12.15</b>       |             | <b>\$12.15</b>       |             |



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# 3-Year Option

## Staff Recommendation:

|                | FY 2013-2014 | FY 2014-2015 | FY 2015-2016 | Total Increase/<br>(Decrease) |
|----------------|--------------|--------------|--------------|-------------------------------|
| Secondary      | \$1.65       | \$0.85       | \$0.80       | \$3.30                        |
| Storm          | \$1.65       | \$1.65       |              | \$3.30                        |
| Culinary       |              |              | \$0.70       | \$0.70                        |
| Sewer - NDSD   | \$1.50       | \$1.50       | \$1.50       | \$4.50                        |
| Sewer - City   |              |              | \$0.90       | \$0.90                        |
| Garbage        | -\$0.55      |              |              | -\$0.55                       |
| Syracuse       | \$2.75       | \$2.50       | \$2.40       | \$7.65                        |
| NDSD           | \$1.50       | \$1.50       | \$1.50       | \$4.50                        |
| Total Increase | \$4.25       | \$4.00       | \$3.90       | \$12.15                       |



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# 3-Year Option

## Cash Flow & Capital Projects:

|                                         | <u>Secondary</u> | <u>Storm</u> | <u>Culinary</u> | <u>Sewer</u> |
|-----------------------------------------|------------------|--------------|-----------------|--------------|
| Cash Balance - 7/1/2013                 | \$ -             | \$ 242,889   | \$ 1,527,972    | \$ 833,000   |
| Cash Addition - FY2014                  | \$ 261,212       | \$ 1,275     | \$ (65,096)     | \$ (75,697)  |
| Cash Addition - FY2015                  | \$ 460,000       | \$ 215,000   | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2016                  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Addition - FY2017                  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Addition - FY2018                  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Balance Available                  | \$ 2,101,212     | \$ 1,104,164 | \$ 3,421,292    | \$ 1,861,606 |
| <b><u>Future Capital Projects**</u></b> |                  |              |                 |              |
| Smedley Acres                           | \$ 538,000       | \$ 117,000   | \$ 651,000      |              |
| 1250 West Street                        |                  | \$ 398,000   | \$ 630,000      |              |
| Melanie Lane                            |                  |              | \$ 334,000      |              |
| 2175 Culinary Waterline                 |                  |              | \$ 41,000       |              |
| Total Capital Assets                    | \$ 538,000       | \$ 515,000   | \$ 1,656,000    | \$ -         |
| Ending Cash Balance                     | \$ 1,563,212     | \$ 589,164   | \$ 1,765,292    | \$ 1,861,606 |

\*\* This is not an all inclusive list. It is only a sample of capital projects with needed repair.



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# 4-Year Option

|                       | FY 2013-2014  | FY 2014-2015  | FY 2015-2016  | FY 2016-2017  | Total Increase/<br>(Decrease) |
|-----------------------|---------------|---------------|---------------|---------------|-------------------------------|
| Secondary             | \$1.28        | \$0.85        | \$1.17        |               | \$3.30                        |
| Storm                 | \$1.27        | \$1.15        | \$0.88        |               | \$3.30                        |
| Culinary              |               |               |               | \$0.70        | \$0.70                        |
| Sewer - NDSD          | \$1.50        | \$1.50        | \$1.50        |               | \$4.50                        |
| Sewer - City          |               |               |               | \$0.90        | \$0.90                        |
| Garbage               | -\$0.55       |               |               |               | -\$0.55                       |
| Syracuse              | \$2.00        | \$2.00        | \$2.05        | \$1.60        | \$7.65                        |
| NDSD                  | \$1.50        | \$1.50        | \$1.50        | \$0.00        | \$4.50                        |
| <b>Total Increase</b> | <b>\$3.50</b> | <b>\$3.50</b> | <b>\$3.55</b> | <b>\$1.60</b> | <b>\$12.15</b>                |



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# 4-Year Option

## Cash Flow & Capital Projects:

|                         | <u>Secondary</u> | <u>Storm</u> | <u>Culinary</u> | <u>Sewer</u> |
|-------------------------|------------------|--------------|-----------------|--------------|
| Cash Balance - 7/1/2013 | \$ -             | \$ 242,889   | \$ 1,527,972    | \$ 833,000   |
| Cash Addition - FY2014  | \$ 219,142       | \$ (28,697)  | \$ (65,096)     | \$ (75,697)  |
| Cash Addition - FY2015  | \$ 358,158       | \$ 154,279   | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2016  | \$ 460,000       | \$ 215,000   | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2017  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Addition - FY2018  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Balance Available  | \$ 1,957,300     | \$ 1,013,471 | \$ 3,355,292    | \$ 1,785,909 |

### Future Capital Projects\*\*

|                         |            |            |              |      |
|-------------------------|------------|------------|--------------|------|
| Smedley Acres           | \$ 538,000 | \$ 117,000 | \$ 651,000   |      |
| 1250 West Street        |            | \$ 398,000 | \$ 630,000   |      |
| Melanie Lane            |            |            | \$ 334,000   |      |
| 2175 Culinary Waterline |            |            | \$ 41,000    |      |
| Total Capital Assets    | \$ 538,000 | \$ 515,000 | \$ 1,656,000 | \$ - |

|                     |              |            |              |              |
|---------------------|--------------|------------|--------------|--------------|
| Ending Cash Balance | \$ 1,419,300 | \$ 498,471 | \$ 1,699,292 | \$ 1,785,909 |
|---------------------|--------------|------------|--------------|--------------|

\*\* This is not an all inclusive list. It is only a sample of capital projects with needed repair.



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# 5-Year Option

|                       | FY 2013-<br>2014 | FY 2014-<br>2015 | FY 2015-<br>2016 | FY 2016-<br>2017 | FY 2017-<br>2018 | Total<br>Increase/<br>(Decrease) |
|-----------------------|------------------|------------------|------------------|------------------|------------------|----------------------------------|
| Secondary             | \$1.10           | \$0.75           | \$0.75           | \$0.70           |                  | \$3.30                           |
| Storm                 | \$1.10           | \$0.75           | \$0.75           | \$0.70           |                  | \$3.30                           |
| Culinary              |                  |                  |                  |                  | \$0.70           | \$0.70                           |
| Sewer - NDSD          | \$1.50           | \$1.50           | \$1.50           |                  |                  | \$4.50                           |
| Sewer - City          |                  |                  |                  |                  | \$0.90           | \$0.90                           |
| Garbage               | -\$0.55          |                  |                  |                  |                  | -\$0.55                          |
| Syracuse              | \$1.65           | \$1.50           | \$1.50           | \$1.50           | \$1.50           | \$7.65                           |
| NDSD                  | \$1.50           | \$1.50           | \$1.50           |                  |                  | \$4.50                           |
| <b>Total Increase</b> | <b>\$3.15</b>    | <b>\$3.00</b>    | <b>\$3.00</b>    | <b>\$1.40</b>    | <b>\$1.60</b>    | <b>\$12.15</b>                   |



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# 5-Year Option

## Cash Flow & Capital Projects:

|                                         | <u>Secondary</u> | <u>Storm</u> | <u>Culinary</u> | <u>Sewer</u> |
|-----------------------------------------|------------------|--------------|-----------------|--------------|
| Cash Balance - 7/1/2013                 | \$ -             | \$ 242,889   | \$ 1,527,972    | \$ 833,000   |
| Cash Addition - FY2014                  | \$ 203,494       | \$ (43,865)  | \$ (65,096)     | \$ (75,697)  |
| Cash Addition - FY2015                  | \$ 333,786       | \$ 97,591    | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2016                  | \$ 399,078       | \$ 161,035   | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2017                  | \$ 460,000       | \$ 215,000   | \$ 440,104      | \$ 219,303   |
| Cash Addition - FY2018                  | \$ 460,000       | \$ 215,000   | \$ 506,104      | \$ 295,000   |
| Cash Balance Available                  | \$ 1,856,358     | \$ 887,650   | \$ 3,289,292    | \$ 1,710,212 |
| <b><u>Future Capital Projects**</u></b> |                  |              |                 |              |
| Smedley Acres                           | \$ 538,000       | \$ 117,000   | \$ 651,000      |              |
| 1250 West Street                        |                  | \$ 398,000   | \$ 630,000      |              |
| Melanie Lane                            |                  |              | \$ 334,000      |              |
| 2175 Culinary Waterline                 |                  |              | \$ 41,000       |              |
| Total Capital Assets                    | \$ 538,000       | \$ 515,000   | \$ 1,656,000    | \$ -         |
| Ending Cash Balance                     | \$ 1,318,358     | \$ 372,650   | \$ 1,633,292    | \$ 1,710,212 |

\*\* This is not an all inclusive list. It is only a sample of capital projects with needed repair.



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# Summary

## Utility Rate Summary:

| <u>Utility Fund</u> | <u>Current Rate</u> | <u>Proposed Increase</u> | <u>New Rate</u> |
|---------------------|---------------------|--------------------------|-----------------|
| Secondary           | \$15.50             | \$3.30                   | \$18.80         |
| Storm               | \$3.50              | \$3.30                   | \$6.80          |
| Culinary            | \$16.50             | \$0.70                   | \$17.20         |
| Sewer               | \$13.30             | \$5.40                   | \$18.70         |
| Garbage             | \$11.00             | -\$0.55                  | \$10.45         |
| Street Light        | \$1.32              |                          | \$1.32          |
| Park Maint.         | \$2.93              |                          | \$2.93          |
| Total Utility       | \$64.05             | \$12.15                  | \$76.20         |



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# UTILITY RATES - COMPARISON

| City             | Total Bill @ 8,000 GAL | Notes                               |
|------------------|------------------------|-------------------------------------|
| ROY CITY         | <b>\$63.28</b>         | Basic                               |
| CLINTON CITY     | <b>\$63.56</b>         | Basic                               |
| LAYTON CITY      | <b>\$68.07</b>         | INCLUDING AN ESTIMATE FOR SEC WATER |
| SYRACUSE CITY    | <b>\$76.20</b>         | BASIC                               |
| FARMINGTON CITY  | <b>\$77.43</b>         | BENCHLAND SECONDARY                 |
| FARMINGTON CITY  | <b>\$89.93</b>         | WEBER BASIN - SECONDARY             |
| CLEARFIELD CITY  | <b>\$80.69</b>         | INCLUDING AN ESTIMATE FOR SEC WATER |
| KAYSVILLE CITY   | <b>\$81.75</b>         | Basic                               |
| WEST POINT       | <b>\$82.65</b>         | Basic                               |
| NORTH ODGEN CITY | <b>\$83.96</b>         | Basic                               |
| SARATOGA SPRINGS | <b>\$102.35</b>        | Basic                               |
| AVERAGE RATE     | <b>\$79.08</b>         |                                     |



SYRACUSE  
EST. CITY 1935

# UTILITY RATES

## Utah cities scramble to comply with EPA mandate

BY KATIE DRAKE THE SALT LAKE TRIBUNE

PUBLISHED FEBRUARY 26, 2012 9:23 PM

This is an archived article that was published on sltrib.com in 2012, and information in the article may be outdated. It is provided only for personal research purposes and may not be reprinted.

Cities that were waiting for a rainy day to deal with new rules on keeping storm water clean have discovered the storm has finally arrived.

Now they're scrambling to raise fees to comply with the regulations — and avoid risking hefty penalties.

"The only choice is to comply or not to comply, and if you don't, you pay," said West Jordan Mayor Melissa Johnson.

Now her City Council is rushing to raise the storm water fee from \$1.80 to \$3.65 in order to hire two new staff members and purchase equipment to bring the city into compliance. The workers will spend their time sending cameras down each of the city's storm water lines to check for debris, as well as maintaining and upgrading all the valves, catch basins and other infrastructure that keeps storm water clean as it enters the Jordan River.

And West Jordan is not alone. Sandy is in the final stretch of a three-year plan to raise fees from \$5 to \$6, and Riverton's will jump from \$4 to \$7 by 2014. All storm water fees are based on "equivalent residential units," so larger properties and businesses will pay even more. The fees vary by city based on individual water systems and how much of the pipe needs to be replaced.

Storm water enters natural waterways untreated, said Rhonda Thiele of the Utah Department of Environmental Quality (DEQ). The standards may require infrastructure improvements to keep debris, chemicals and silt from destroying river banks, fisheries and wetlands where storm water enters the ecosystem.

Cities have known about the new requirements since 2002, but the compliance deadline was extended to Feb. 1, 2012, said Thiele. Now she is auditing the 78 Utah municipalities that fall under the regulations, which are set by the federal Environmental Protection Agency and enforced by Utah's DEQ.

The audit examines six factors, from public education to construction-site runoff. The eventual goal, Thiele said, is that only pure rainwater and snowmelt flow into natural waterways. Most cities aren't there yet, but as long as they are making progress, DEQ is usually willing to work with them, Thiele said.

But it's a different story for those who fail to show progress on implementing major tenants of the plan, Thiele said. DEQ is still determining the penalty for those who aren't making a diligent effort, but it is likely to involve hefty fines, she said.

Full compliance can take several years, said Taylorsville Mayor Russ Wall. The city adopted a storm water fee about six years ago, but only about 75 percent of its system is in compliance. Wall is hoping the city's consistent effort will reflect favorably on its audit.

"Nobody likes fees and taxes, but you have to maintain your infrastructure," Wall said. "An emergency is more costly than construction, and nobody wants to get spanked by the EPA."

Others have not planned so far in advance, said Jennifer Scott, district director for Rep. Jason Chaffetz. His office has been flooded with requests for help in complying this year. Many attribute their failure to act to the tough economy, while others were waiting to see if the mandates changed, Scott said.

## Fruit Heights storm water bills to rise by 150 percent

By [Dana Rimington](#)

[Standard-Examiner](#)

Sun, 06/26/2011 - 9:52pm

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### Images



FRUIT HEIGHTS -- After 14 years of unchanged rates, residents and business owners here will soon see a dramatic increase in their storm water utility bills.

The city council tried to be mindful of residents by not raising rates in previous years, but the storm water utility expenses are now in the red.

To address those expenses, the council recently passed a motion -- by a 3-2 vote -- for the 150 percent increase, which will result in about a \$6 increase per month for most residents.

Commercial businesses, however, will see a significant increase in rates because of a change in recalculation of the measurement rates.

It was discovered that the rates set in 1997 needed to be refigured to match this year's calculations, said Brandon Jones, Fruit Heights city engineer.

With the outdated rates, residents were carrying some of the burden of the commercial businesses, which will not be the case with the utility rate increases.



SYRACUSE  
EST. CITY 1935

# UTILITY RATES

## Bountiful considers water rates bump

### Images



**BOUNTIFUL** -- City officials are expected to consider raising water rates as part of the new fiscal year budget for 2013-14.

City Manager Gary Hill said needs to the city's water infrastructure have city officials looking at the possibility of raising water rates. The city's fiscal year runs July 1 to June 30.

The city council will consider a tentative budget at its May 14 meeting and is required to pass a finalized budget in June. Hill said the spending plan is a work in progress, with council review still required on some items.

Even with a possible increase, however, he said the spending plan will be conservative.

"As a new kid here this is very conservative," Hill said of the budget. Hill became city manager earlier this year, replacing long-time city manager Tom Hardy.

A conservative approach to fiscal matters is not new for city officials. Bountiful has not raised property taxes for 31 consecutive years.

The city is currently operating under a \$62 million spending plan for the current fiscal year. A lion's share of the spending plan includes the operation of the Bountiful City Light & Power Company, the city owned utility. Almost \$26 million of the existing budget is funding related to BCL&P.

Bountiful also owns its own landfill and golf course, which are also funded through the budget.

## Layton adds street light fee to Layton 2013-2014 budget plans



**LAYTON** — City residents will pay a new street lighting utility bill of \$2 per month, per household, as part of the 2013-2014 fiscal year budget, which was recently unveiled publicly.

The street lighting fee will help city officials purchase some existing street lights in the city from Rocky Mountain Power, potentially saving the city in utility costs over the long term. It is one of two fee increases expected to be in the new fiscal year budget.

A pass-through increase of \$1.50 per household from North Davis Sewer District is also part of the spending plan.

There is no property tax increase as part of the proposal.

Two other key components of the proposed fiscal year plan include a 2.5 percent merit pay increase for some of the city's 300 full-time employees and a projected increase of 6 percent in retirement benefits for city employees. The city's fiscal year runs July 1 to June 30.

City council members unanimously approved a tentative budget for the new fiscal year at the first meeting of the month.

They also approved an outline for a public hearing and final consideration of the proposal.

A public hearing on the budget is scheduled for 7 p.m. June 20.

The city council is expected to finalize approval of a new fiscal year plan after the hearing.

City Manager Alex Jensen said the lion's share of the new budget is in place but said that could be subject to change in the weeks before the public hearing.



SYRACUSE  
EST. CITY 1935

# UTILITY RATES

## North Ogden fee hikes imposed



**NORTH OGDEN** – Residents will be paying \$4.69 more per month to cover depreciation costs for water, sewer and storm water services. The city council voted unanimously for the increase as a part of its final budget recently.

Residents won't start seeing the increase for a month or so until the council approves the rate increase again when it approves the updated consolidated fee schedule next month.

The increase is due in part to the \$1.5 million being taken from the enterprise fund to pay for the public works building. Rather than bond for the building, the council voted to take the money from different areas in the budget, depleting the enterprise fund budget. So, residents will still be paying some out of pocket for the building, just not in the form of a bond or property tax increase.

Councilman Brent Taylor suggested it would be wise to try to earmark the money collected for depreciation for specific items that may be needed in the future, but city finance director Bryan Steele said that wasn't possible under the law.

Councilman Wade Bigler said he didn't want other councils to come in and spend money on things other than depreciation.

Mayor Richard Harris said there are specific things those funds have to be used for, like roads, sewer systems or water infrastructure. "We're not going to use it for a park," Harris said.

The public works building does fall within those parameters in some ways because it is a dilapidated infrastructure.

Taylor said he wished that not so much money had been taken from the fund for the public works building. "It was my idea to use some of the money, but not so much," he said, the rest perhaps coming from bonding. That way, residents wouldn't see such a big hit and the funds wouldn't be so depleted in case there is an emergency in the sewer, water or storm water departments.

"I feel it will hamstring capital projects and we are just kicking the can down the road," he said in respect to building the fund back to where it needs to be.

| City                | Water                                     | Use 0 Gallons | Use 4,000 Gallons | Use 8,000 Gallons | Secondary Water                                                                                                | Storm  | Sewer                                               | Garbage               | Green Waste | Recycling                               | Other Fees                                                 | Total Bill @ 8,000 GAL | Notes                                            |
|---------------------|-------------------------------------------|---------------|-------------------|-------------------|----------------------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------|-----------------------|-------------|-----------------------------------------|------------------------------------------------------------|------------------------|--------------------------------------------------|
| SYRACUSE CITY       | \$16.50 base up to 8,000 Gal              | \$16.50       | \$16.50           | \$16.50           | \$15.50<br>- based on line size                                                                                | \$3.50 | \$ 13.30                                            | \$11.00 for first can | \$6.50      | N/A                                     | \$1.32 street light fee                                    | \$64.05                | Basic                                            |
|                     | 8,000 - 15,000 Gal - \$2.05 per/thousand  |               |                   |                   |                                                                                                                |        |                                                     | \$7.20 for addl can   |             |                                         | \$2.93 park maint. fee                                     |                        | \$70.55                                          |
| CLINTON CITY        | \$12.50 base up to 10,000 Gal             | \$12.50       | \$12.50           | \$12.50           | \$21.41<br>- based on lot size                                                                                 | \$4.25 | \$ 10.70                                            | \$13.10 for first can | N/A         | N/A                                     | \$0.65 animal control                                      | \$63.56                |                                                  |
|                     | 10,000 - 15,000 Gal - \$1.05 per/thousand |               |                   |                   |                                                                                                                |        |                                                     | \$9.50 for addl can   |             |                                         | \$0.95 emergency dispatch                                  |                        |                                                  |
| WEST POINT          | \$22.50 base up to 6,000 Gal              | \$22.50       | \$22.50           | \$25.20           | \$22.50<br>- based on lot size                                                                                 | \$4.00 | \$ 14.70                                            | \$11.50 for first can | \$6.00      | 4.75<br>Mandatory                       | No additional fees                                         | \$82.65                | Basic                                            |
|                     | 6,000 - 10,000 Gal - \$1.35 per/thousand  |               |                   |                   |                                                                                                                |        |                                                     | \$9.00 for addl can   |             |                                         |                                                            |                        | \$88.65                                          |
| LAYTON CITY         | \$12.85 base up to 7,000 Gal              | \$12.85       | \$12.85           | \$13.99           | NOT PROVIDED BY CITY<br>3 SEPARATE PRIVATE COMPANIES - RANGE FROM \$175 - \$250 FOR 1/4 ACRE                   | \$4.60 | \$ 15.95                                            | \$10.70 for first can | N/A         | N/A                                     | Proposed \$2.00 street light fee                           | \$47.24                |                                                  |
|                     | 7,000 - 15,000 Gal - \$1.14 per/thousand  |               |                   |                   |                                                                                                                |        |                                                     | \$8.10 for addl can   |             |                                         |                                                            |                        | \$68.07                                          |
| KAYSVILLE CITY      | \$21.00 base up to 8,000 Gal              | \$21.00       | \$21.00           | \$21.00           | \$22.00<br>- based on lot size                                                                                 | \$8.00 | \$ 19.25                                            | \$11.50 for first can | \$6.50      | 3.85<br>OPT OUT                         | No additional fees                                         | \$81.75                | Basic                                            |
|                     | 8,000 - 15,000 Gal - \$2.00 per/thousand  |               |                   |                   |                                                                                                                |        |                                                     | \$8.00 for addl can   |             |                                         |                                                            |                        | \$92.10                                          |
| City                | Water                                     | Use 0 Gallons | Use 4,000 Gallons | Use 8,000 Gallons | Secondary Water                                                                                                | Storm  | Sewer                                               | Garbage               | Green Waste | Recycling                               | Other Fees                                                 | Total Bill @ 8,000 GAL | Notes                                            |
| ROY CITY            | \$6.65 base                               | \$6.65        | \$9.73            | \$12.81           | NOT PROVIDED BY CITY - ROY CONSERVANCY BILLS BASED ON SIZE OF LOT - 1/4 ACRE = \$182.78                        | \$2.00 | \$14.35<br>OR<br>\$27.45<br>EAST OF<br>1900<br>WEST | \$13.35 for first can | N/A         | 6.20<br>OPTIONAL                        | \$5.54 CAPITAL IMPR./EQUIP FEE                             | \$63.28                | Basic                                            |
|                     | 0 - 9,000 Gal - \$0.77 per/thousand       |               |                   |                   |                                                                                                                |        |                                                     | \$8.10 for addl can   |             |                                         |                                                            |                        | \$76.38                                          |
| FARMINGTON CITY     | \$18.25 base up to 5,000 Gal              | \$18.25       | \$18.25           | \$25.75           | NOT PROVIDED BY CITY<br>3 SEPARATE PRIVATE COMPANIES - RANGE FROM \$100 - \$250 FOR 1/4 ACRE                   | \$7.00 | \$ 20.00                                            | \$12.50 for first can | N/A         | 3.85 OPT OUT WHEN STARTED NOW MANDATORY | No additional fees                                         | \$77.43                | BENCHLAND SECONDARY                              |
|                     | 5,000 - 10,000 Gal - \$2.50 per/thousand  |               |                   |                   |                                                                                                                |        |                                                     | \$9.75 for addl can   |             |                                         |                                                            |                        | \$89.93                                          |
| CLEARFIELD CITY     | \$11.53 base                              | \$11.53       | \$15.01           | \$18.49           | NO SECONDARY SERVICE IN MAJORITY OF CITY. WATER WITH CULINARY WATER - CAN ADD UP TO 200 -300 TO BILL IN SUMMER | \$4.61 | \$ 19.25                                            | \$15.25 for first can | N/A         | N/A                                     | 6% TAX ON WATER AND SEWER CHARGES                          | \$59.86                | \$2.26 IN TAX ON WATER & SEWER                   |
|                     | 0 - 10,000 Gal - \$0.87 per/thousand      |               |                   |                   |                                                                                                                |        |                                                     | \$7.00 for addl can   |             |                                         |                                                            |                        | \$80.69                                          |
| NORTH ODGEN CITY    | \$6.49 base                               | \$6.49        | \$12.97           | \$19.45           | NOT PROVIDED BY CITY<br>SEPARATE PRIVATE COMPANY - \$349 PER YEAR                                              | \$6.10 | \$ 17.76                                            | \$11.57 for first can | N/A         | INCLUDED IN GARBAGE FEE                 | No additional fees                                         | \$83.96                |                                                  |
|                     | 0 - 20,000 Gal - \$1.62 per/thousand      |               |                   |                   |                                                                                                                |        |                                                     | \$12.59 for addl can  |             |                                         |                                                            |                        |                                                  |
| SARATOGA SPRINGS    | 15.08 base                                | \$15.08       | \$21.28           | \$27.48           | \$16.87<br>- based on lot size                                                                                 | \$4.45 | \$15.99 plus 2.88 per 1000 gallons of water used    | \$11.69 for first can | N/A         | 5.31<br>Optional                        | \$2.83 - 3.34 street light fee depending on where you live | \$102.35               | With 8,000 gallons of water usage for sewer calc |
|                     | 0 - 10,000 Gal - \$1.55 per/thousand      |               |                   |                   |                                                                                                                |        |                                                     | \$6.73 for addl can   |             |                                         |                                                            |                        |                                                  |
| City                | Water                                     | Use 0 Gallons | Use 4,000 Gallons | Use 8,000 Gallons | Secondary Water                                                                                                | Storm  | Sewer                                               | Garbage               | Green Waste | Recycling                               | Other Fees                                                 | Total Bill @ 8,000 GAL | Notes                                            |
| <b>AVERAGE RATE</b> |                                           | \$14.34       | \$16.26           | \$19.32           | \$20.51                                                                                                        | \$4.85 | \$16.13                                             |                       | \$6.33      | \$4.79                                  |                                                            | \$77.97                |                                                  |



# COUNCIL AGENDA

June 25, 2013

Agenda Item #d                      Discussion regarding culinary water rates.

***Factual Summation***

- This item was added at the request of Councilmember Lisonbee during the most recent City Council Meeting. Staff will be available to answer questions.



# COUNCIL AGENDA

June 25, 2013

Agenda Item #e                      Discussion regarding fireworks.

***Factual Summation***

- Please direct any questions regarding this agenda item to Fire Chief Eric Froerer.
- Chief Froerer would like to update the council on recent legislative changes to fireworks restrictions and the potential for any necessary restrictions in the future.



# COUNCIL AGENDA

June 25, 2013

Agenda Item #F                      Discussion regarding agenda item 3,  
recommendation of Award of Contract for Marilyn  
Drive Road Improvement Project.

***Factual Summation***

- Please direct any questions regarding this agenda item to Public Works Director Robert Whiteley.
- Please see attached documents from Special Meeting agenda item 3.



## MEMORANDUM

**To:** Mayor and City Council  
**From:** Public Works Department  
**Date:** June 19, 2013  
**Subject:** Bid Award for Marilyn Acres Subdivision Culinary Waterline Project Phase II

### Background:

This culinary waterline project is one that was identified on our list presented to city council as a high priority due to the age, consistent leaks and restrictions the existing 6" lines place on the system. This project will involve the replacement of an existing 6" culinary main with an 8" main at the following locations:

- Marilyn Drive from Antelope Drive to Valerie Drive
- Valerie Drive
- Valerie Court
- David Street (Portion of David will be completed with Phase I)

In addition, to help preserve the asphalt in the subdivision, new storm drain will be installed at the intersections of David Street and Dallas Street, Marilyn Drive & David Street and Marilyn Drive and Melanie Lane. Asphalt will be replaced full width on all the above mentioned streets.

Marilyn Acres Subdivision Culinary Waterline Project Phase I included culinary main replacement on a portion of David Street and was bid out separately from Phase II. The low bidder on the Phase I project was Ormond Construction, Inc. with a bid price of \$132,642.51. Phase I will use up the remaining amount left on the City's culinary water STAGG grant which expires December, 2013. Since the City was bidding these projects so late in the construction season, we were uncertain how competitive the bid prices would be. Knowing we needed to use the remainder of the STAGG grant this construction season, Phase I and II were bid separately with the anticipation if the bid prices came back higher than expected, only Phase I would be awarded this year and Phase II would be rebid next spring. Public Works is pleased with the bid results for both Phase I and II and recommends constructing both projects this year.

### Schedule:

The construction will begin as soon as contract documents are in place and will be completed by fall of 2013.

### Cost:

The bid amount for the total project for Phase II is \$645,397.45 and the funding breakdown is as follows:

|                   | Culinary Capital | Secondary Capital | Storm Drain Capital | Class C      |              |
|-------------------|------------------|-------------------|---------------------|--------------|--------------|
| <b>Total</b>      | \$416,881.72     | \$14,582.00       | \$91,057.81         | \$122,875.92 | \$645,397.45 |
| <b>Budget</b>     | \$543,357.00     | \$20,000.00       | \$120,000.00        | \$200,000.00 | \$883,357.00 |
| <b>Difference</b> | \$126,475.28     | \$5,418.00        | \$28,942.19         | \$77,124.08  | \$237,959.55 |

### Recommendation:

We recommend that the bid be awarded to Elden H. Knudson Construction, Inc.



June 19, 2013

Mr. Robert Rice, City Manager  
Syracuse City Corporation  
1979 West 1900 South  
Syracuse, Utah 84075

Re: Recommendation for Award of Contract  
Marilyn Acres Subdivision Culinary Waterline Project Phase II

Dear Bob:

Enclosed is the bid tabulation for the bids opened June 11, 2013 for the above referenced project. This project will install storm drain new storm drain and catch basins at the intersections of Dallas and David, Marilyn and David and Marilyn and Melanie. In addition, this project will replace the old culinary water main in Marilyn Drive, Valerie Drive, Valerie Court, David Street and Dallas Street. Full width asphalt replacement will be performed on these streets. This project will abandon old cast iron culinary mains which have historically been a consistent source of leaks.

The low bidder and bid amount are as follows:

Low Bidder: Elden H. Knudson Construction, Inc.  
2127 West 3300 South  
Ogden, Utah 84401  
Telephone: (801)-430-1034  
Bid Amount: \$645,397.45  
Engineer's Probable Cost Opinion: \$890,000.00

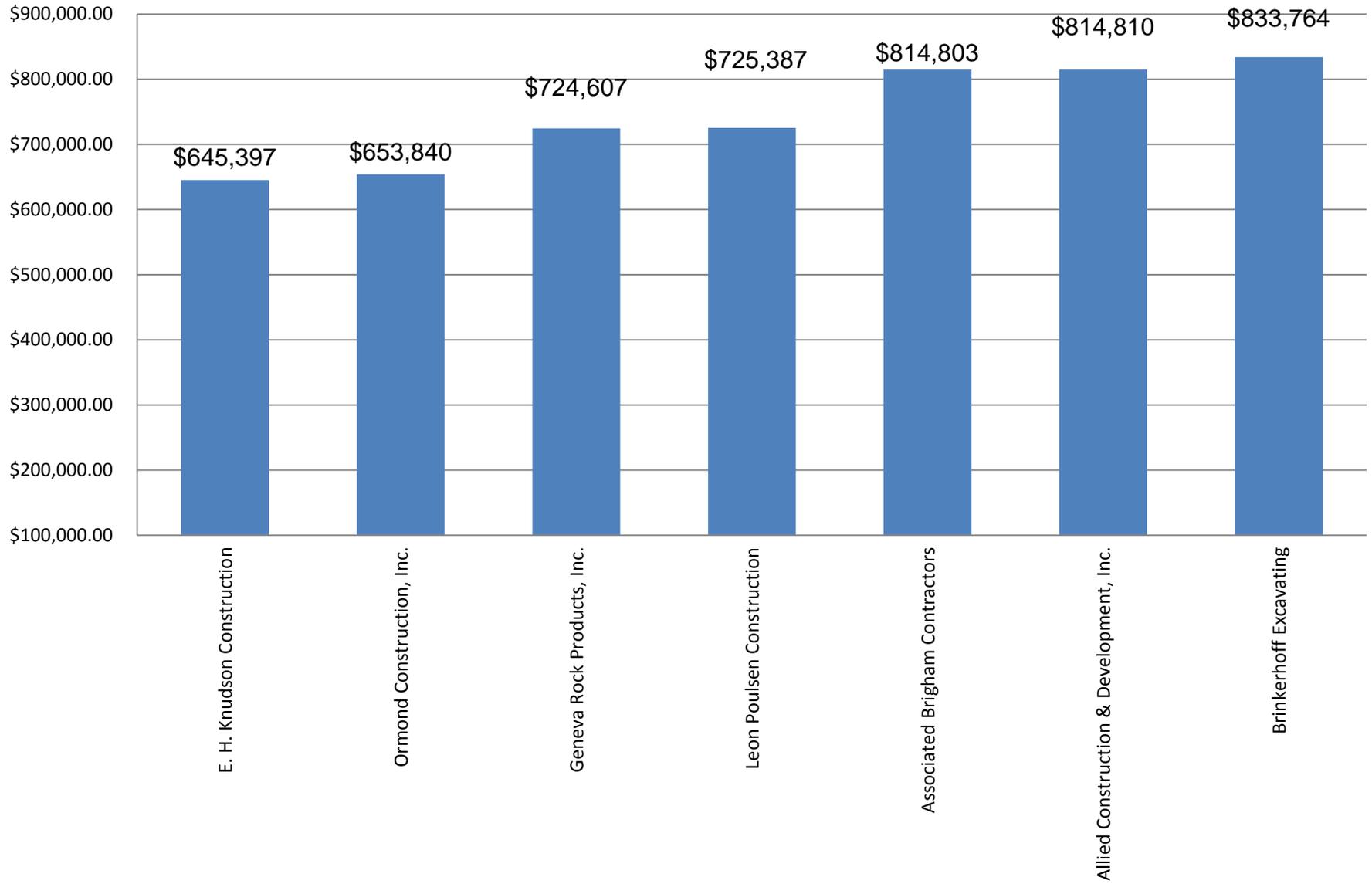
We have reviewed the submitted bid from all bidders and recommend awarding the contract to Elden H. Knudson Construction, Inc.

Sincerely,

Robert Whiteley  
Public Works Director

# Bid Tabulation

## Marilyn Acres Subdivision Culinary Waterline Project Phase II



# SYRACUSE CITY CORPORATION

## MARILYN ACRES SUBDIVISION CULINARY WATERLINE PROJECT PHASE II

LAST UPDATED:  
MARCH 9, 2013

DRAWN BY: BB



MARILYN ACRES SUBDIVISION CULINARY  
WATERLINE PROJECT PHASE II

COVER



SYRACUSE  
EST. CITY 1935

MARCH 2013

WO 2013-06

SHEET:  
1 OF 23



## SYRACUSE CITY

### Syracuse City Council Special Meeting Agenda

**June 25, 2013 – immediately following the Work Session Meeting,  
which begins at 6:00 p.m.**

City Council Conference Room

Municipal Building, 1979 W. 1900 S.

1. Meeting called to order  
Adopt agenda
2. Approval of Minutes:
  - a. Work Session of May 28, 2013
3. Recommendation of Award of Contract for Marilyn Drive Road Improvement Project.
4. Status update on secondary water.
5. Consideration of adjourning into Closed Executive Session pursuant to the provisions of Section 52-4-205 of the Open and Public Meetings Law for the purpose of discussing the character, professional competence, or physical or mental health of an individual; pending or reasonably imminent litigation; or the purchase, exchange, or lease of real property (roll call vote).
6. Adjourn

~~~~~

In compliance with the Americans Disabilities Act, persons needing auxiliary communicative aids and services for this meeting should contact the City Offices at 801-825-1477 at least 48 hours in advance of the meeting.

#### CERTIFICATE OF POSTING

The undersigned, duly appointed City Recorder, does hereby certify that the above notice and agenda was posted within the Syracuse City limits on this 20<sup>th</sup> day of June, 2013 at Syracuse City Hall on the City Hall Notice Board and at <http://www.syracuseut.com/>. A copy was also provided to the Standard-Examiner on June 20, 2013.

CASSIE Z. BROWN, CMC  
SYRACUSE CITY RECORDER

\*\*Members of the public who desire to offer a thought or invocation at Syracuse City Council Meetings shall contact the City Administrator at least two (2) weeks in advance of the meeting. Request will be honored on a first come, first serve basis. In the event there are no requests to offer a comment or prayer, the Mayor may seek opening comment or prayer from those members of the public attending the meeting or from City Staff or City Council.



# COUNCIL AGENDA

June 25, 2013

Agenda Item #2

Approval of Minutes.

***Factual Summation***

- Please see the draft minutes of the following meetings:
  - a. Work Session of May 28, 2013
  
- Any question regarding this agenda item may be directed at Bob Rice, City Manager

Minutes of the Syracuse City Council Work Session Meeting, May 28, 2013.

Minutes of the Work Session meeting of the Syracuse City Council held on May 28, 2013, at 6:00 p.m., in the Council Work Session Room, 1979 West 1900 South, Syracuse City, Davis County, Utah.

Present: Councilmembers: Brian Duncan  
Craig A. Johnson  
Karianne Lisonbee  
Douglas Peterson  
Larry D. Shingleton

Mayor Jamie Nagle  
City Manager Robert Rice  
City Recorder Cassie Z. Brown

City Employees Present:  
City Attorney Will Carlson  
Finance Director Steve Marshall  
Public Works Director Robert Whiteley  
Parks and Recreation Director Kresta Robinson  
Fire Chief Eric Froerer  
Police Chief Garrett Atkin  
Community Development Director Sherrie Christensen

The purpose of the Work Session was for the Governing Body to hear public comments; hear a presentation from Scott Pepler re: recycling; receive a report from the Mosquito Abatement District; hear a request to be on the agenda from the West Davis Corridor Team; receive a presentation from the North Davis Sewer District; review special meeting agenda items three, four, and five; discuss RDA areas; discuss proposed utility rate increases; discussion regarding the budget; and discuss Council business.

[6:02:26 PM](#)

**Public comments**

[6:02:42 PM](#)

Leon Smith stated he wanted to talk to the Council about watering restrictions; he read in the newspaper some information about proposals to better control water consumption in the City and he asked if that is true. Mayor Nagle stated the City has been asked by the Weber Basin Water Conservancy District and the Davis and Weber Canal Company to consider watering restrictions. Mr. Smith stated his thoughts are that it is necessary to get serious about the issue. He stated one proposal was to educate the residents about potential water shortages and another was to impose a watering schedule for the City. He stated he does not think education will work because there is a prevailing attitude that people pay for their water

1 year round and they want to make sure they are going to get their fair share of water. He added some people have always  
2 watered their lawn in the same manner and they will not be willing to change that. He stated that for the past two years he  
3 has driven past the same business daily on his way to work and they are watering every day for approximately an hour. He  
4 stated he called the business and asked the receptionist if the owner knew his water was coming on every day. He stated the  
5 receptionist told him that she would inform her boss of the situation so he watched the business for another five or six weeks  
6 and noticed his watering habits had not changed. He stated he called again and there were still no changes. He stated he also  
7 called the City and the City told him there is nothing they can do about it. He stated it is a difficult issue and he is not sure  
8 what can be done to get people to conserve.

9  
10 [6:05:17 PM](#)

11 TJ Jensen stated he wanted to give a “shout-out” to Councilmember Lisonbee; last weekend he had a situation in his  
12 neighborhood with ducklings. He stated they got separated from their mother and they were stuck in a storm water grate. He  
13 stated he also found one in his basement and rather than take the ducklings to Ogden he called Councilmember Lisonbee to  
14 see if she knew anyone local that could handle wildlife. He stated there is a local resident that has a duck pond and she was  
15 able to take the ducks. He stated he wanted to thank Councilmember Lisonbee for her assistance in the matter.

16  
17 [6:06:17 PM](#)

18 Ray Zaugg stated the Council will be talking about a potential opt-out recycling program. He stated the he thinks  
19 the City should elect for an opt-in program because many residents in an opt-out program would assume they are required to  
20 participate and they do not have an option to opt-out. He then stated he also wanted to comment about the potential utility  
21 rate increases and he noted one of the calculations in the staff report is inaccurate. He added he feels the proposed increases  
22 over the next three years is too steep and he asked the Council to carefully review the issue.

23  
24 [6:07:11 PM](#)

25 **Presentation from Scott Pepler re: recycling**

1 Scott Pepler with Rocky Mountain Recycling addressed a letter to Mayor Nagle asking that the City consider an  
2 opt-out curbside recycling program. The letter was included in the Council packet along with letters from two Legacy Junior  
3 High School classes encouraging the City to implement a recycling program.

4 Mr. Pepler provided a PowerPoint presentation to the Council regarding his proposal to consider an opt-out  
5 recycling program.

6 [6:18:31 PM](#)

7 Council discussion regarding the proposal ensued with the outcome being that the Council was not interested at this  
8 time in considering an opt-out curbside recycling program.

9

10 [6:37:30 PM](#)

11 **Report from the Mosquito Abatement District**

12 The Council received a report from Gary Hatch, manager of the Mosquito Abatement District and Lloyd Waite,  
13 Syracuse City's representative on the District's Board of Trustees regarding the operations of the District in Syracuse and the  
14 surrounding community. The report was prompted by an email received from a resident regarding District operations and a  
15 suggestion to use dragonflies to control the mosquito population.

16 [6:48:09 PM](#)

17 The Governing Body asked questions regarding District operations throughout the presentation.

18

19 [7:22:58 PM](#)

20 **Request to be on the agenda: West Davis Corridor team**

21 Utah Department of Transportation representative Randy Jeffries made a request to be on the agenda to provide the  
22 Council with an update regarding the progress of the West Davis Corridor project. He followed a PowerPoint presentation,  
23 which is available on UDOT's West Davis Corridor website.

24 [7:39:10 PM](#)

25 The Governing Body then directed inquiries to Mr. Jeffries regarding the West Davis Corridor project.

26

1 [6:57:38 PM](#)

2 **Presentation from North Davis Sewer District**

3 During the May 14, 2013 Council meeting City staff presented the North Davis Sewer District's (NDS) request to  
4 the Syracuse City Council to extend the contract with the NDS. The City Council expressed concerns about the length of  
5 the extension and asked that a representative of the NDS come to the meeting on the night of May 28 to identify the  
6 minimum extension that the NDS needs for current bonding.

7 [6:58:06 PM](#)

8 Kevin Cowan, General Manager of the NDS, Dave Tafoya, NDS Board Chair, James Schroeder, NDS  
9 Accountant, and Preston Kirk, representative of George K. Baum Accounting associates were present to answer questions  
10 from the Council regarding the proposal to extend the NDS contract extension.

11 [7:06:07 PM](#)

12 Council discussion regarding the item ensued, with the outcome being that the Council will consider an amendment  
13 to the agreement at the May 28, 2013 meeting; that amendment will then be provided to the NDS Board for their  
14 consideration and potential acceptance.

15

16 [7:54:46 PM](#)

17 **Review Special meeting Agenda item 3 – Proposed**

18 **Ordinance 13-06, Amending Title Six, Chapter Five of**

19 **the Syracuse City Code regarding irrigation service.**

20 A staff memo from City Attorney Carlson explained the Davis & Weber Counties Canal Company, the primary  
21 supplier to Syracuse' pressurized irrigation ("secondary") water system, announced that 2013 water shortages require it to  
22 drastically limit water distribution. Customers can expect to receive 25% to 40% less water this year than in previous years.

23 Since Syracuse operates its own secondary water system, the City has a choice in how to impose this reduction on the  
24 residents of Syracuse. Even so, the City should plan to have only 60% of last year's water to meet the secondary water needs  
25 of residents and visitors during this irrigation season. This requires the City to promptly implement some form of water  
26 conservation. Traditionally, municipal water conservation efforts have focused on prescriptive regulations, such as rationing

1 water for specific uses or requiring installation of specific appliances or infrastructure. Recent research suggests that market-  
2 based policies (charge higher rates for more use and lower rates for less use) are the most cost effective way to conserve,  
3 while prescriptive regulations are better at reaching a specific conservation level. See “Comparing price and nonprime  
4 approaches to urban water conservation,” Water Resources Research, Volume 45, W04301. Since Syracuse has thus far  
5 declined to meter secondary water, it does not currently have an option of a market-based conservation strategy.

6 At the meeting on May 14, 2013, the City Council expressed interest in an ordinance recommended by the St. Johns  
7 River Water Management District in Florida. This ordinance allows watering two days per week for up to thirty minute  
8 increments, subject to several exceptions. Four concerns were expressed:

- 9 1. Agricultural irrigation needs to be exempt.
- 10 2. Any penalties should only be applicable in drought years.
- 11 3. Moisture detectors on sprinkler systems may be prohibitively expensive.
- 12 4. People should be trusted to self- regulate without an ordinance.

13 Regarding agriculture, in the draft ordinance landscape irrigation is defined to exclude “agricultural crops, nursery  
14 plants, cemeteries, golf course greens, tees, fairways, primary roughs, and vegetation associated with recreational areas such  
15 as playgrounds, football, baseball and soccer fields.” Accordingly, farms will not be regulated by the proposed ordinance.

16 An enforcement trigger has also been added to the proposed ordinance. The proposed ordinance attaches no penalty for  
17 watering outside the schedule “unless the City Council has passed a resolution declaring a drought.” The ordinance allows  
18 the Council to pass such a resolution upon recommendation of the Public Works Director and limits the life span of the  
19 resolution to “the end of Daylight Savings Time for that calendar year or passage of a nullifying resolution by the City  
20 Council.” Basic research on moisture detectors indicates that costs can be minimal. For example, Amazon is selling a Hunter  
21 Solar Sync Rain Sensor for about \$77. Finally, whether to regulate secondary water conservation or simply educate is a  
22 policy decision for the Council to make. Even so, as operators of a secondary water system, the City has a duty to ensure that  
23 the system operates. The City has been informed that its water supply will be substantially lower this year than in past years.  
24 Failure to take action to conserve water will result in a drained and damaged system and substantial expense to the city.

25 [7:54:49 PM](#)

26 Mr. Carlson reviewed his staff memo. There was input from City Manager Rice and Public Works Director  
27 Whiteley throughout the staff discussion.

1 [8:02:36 PM](#)

2 Council discussion regarding the item ensued. The Council reached the consensus to continue the public hearing  
3 during the special meeting and table adoption of the proposed ordinance.

4  
5 [8:26:06 PM](#)

6 **Review Special Meeting Agenda items 4 and 5 –**  
7 **Proposed agreements with Irben Development for**  
8 **purchase of water shares.**

9 A staff memo from City Attorney Carlson explained in January 2012 the City entered an agreement to sell 60.595  
10 acres of land directly south of Jensen Park (“South Jensen Park”) to Irben Development (“Irben”). That sale had a settlement  
11 deadline of October 18, 2013 and did not include the transfer of any water rights. Irben has asked the city to finance the sale  
12 over 18 months between next October and April 2015. Additionally, Irben plans to develop a residential subdivision on the  
13 property, which will require Irben to convey water rights to the City as a condition of subdivision approval. Seller Financing  
14 Irben has drafted the attached “Addendum No. 4” to the Real Estate Purchase Contract and requests the City Council’s  
15 approval. This addendum proposes five changes to the contract:

- 16 1. Under the current agreement, payment of \$1,969,400 is due in full at the settlement date, October 18, 2013.  
17 Under this Addendum, Irben will make a down payment “at closing” of \$527,850.00. There is no closing date  
18 provided.
- 19 2. Under this addendum, Irben will make three additional payments at six month intervals for the remaining  
20 \$1,441,550.00 owed.
- 21 3. The City’s loan to Irben will be charged 3% simple interest per year. Assuming the payments are on schedule,  
22 this will amount to approximately \$43,200.00 in interest over 18 months.
- 23 4. The land would be divided into four horizontal quarter sections stacked from south to north. At closing, the  
24 southernmost section would be transferred to Irben. Upon the first loan payment the next section to the north  
25 would be transferred, and so on until all payments are received and all land transferred.

1           5. Irben has until September 18, 2013 to choose this City financing. By September 18, both parties must also agree  
2           on the form of the promissory note.

3           City staff has three concerns about the proposed addendum: the extended time of the contract will extend the time  
4 that the city is exposed to risk, seller financing will place restrictions on the city's ability to expend the funds as required by  
5 law, and the proposed time frame assumes a rate of home sales that is historically unsupported for new subdivisions in  
6 Syracuse. First, approving addendum 4 will extend the time that the city is exposed to risk. The City entered this real estate  
7 purchase contract seventeen months ago and is obligated for another five months under the current agreement. During that  
8 time, the city has been prevented from considering changed circumstances, including the improved economy and UDOT's  
9 proposed West Davis Corridor route, in deciding what to do with the land. Should addendum 4 be approved by the City  
10 Council, the City will sell land in April 2015 based on its estimated value in December 2011. Additionally, during the time  
11 that the city is financing Irben's development, it will also be regulating the development as the land use authority. This could  
12 result in subdivisions being proposed under an ultimatum of approving a subdivision or risking the sale of the remaining  
13 sections of land. Second, the land in question was purchased by the city with park purchase impact fees and so the money  
14 from the sale must be used to purchase additional park lands. Under state code, the city must spend impact fees  
15 "within six years of their receipt." UCA §11-36a-602(2)(a). Unspent impact fees plus interest should be refunded to the  
16 developer. UCA §11-36a-603. Neither statutes nor case law outline the time frame that applies when impact fees are spent  
17 and then returned to the city years later, which is what is anticipated here. If the time frame is six years from original receipt,  
18 then the City will be in violation as soon as it receives payment for South Jensen Park. If the six year time frame is paused  
19 while the city has expended the funds and then resumes when the funds are returned to the city, then it will be important the  
20 City act promptly to expend the Park Purchase funds. If the six year time frame restarts when spent impact fees are returned,  
21 then the city will have six years from the first payment for South Jensen Park to spend the funds. Since the city is selling a  
22 large span of park property, it would serve to promptly purchase a separate large span of park property. The Seller financing  
23 will create a span of at least eighteen months between the first payment and final payment to the city, which will require the  
24 city to either purchase multiple smaller land areas or to wait to purchase a large space. This delay increases the risk that the  
25 City would be in violation of the time restraints on expending impact fees. Third, while Irben anticipates using profits from  
26 the sale of properties on the earlier sections to fund their payments for later sections, the eighteen month time frame would  
27 require that homes be built at a rate that is not supported historically in Syracuse. This increases the risk to the city that either

1 1- the sale of the later sections will fall through, or 2- Irben will return with requests for subsequent addendums to further  
2 extend the time before payment is due. Since the recession, developers have been cautious in creating subdivisions. For  
3 example, Trailside Park has proposed subdivision phases of approximately ten lots at a time, completing one phase before  
4 beginning the next. Since 2002, city code has required subdivisions larger than 36 lots be planned in subsequent phases,  
5 which prevents developers from over committing resources before the subdivision can be completed. Even with this cap,  
6 several subdivisions across the city remain unfinished, the result of developers who were more optimistic than the market  
7 could support. Irben anticipates building approximately 200 homes, or 50 per quarter section. This would require Irben to  
8 build and sell approximately 150 lots over the course of eighteen months, approximately two per week every week. Even  
9 with the recovering economy, Syracuse has issued building permits for 74 single family residences in 2013, which is about  
10 3.5 per week across the entire city. While possible, Irben's projected development is very optimistic. Should Irben fall short,  
11 the City will either be left holding the bag on the remainder of the property, or be asked by Irben to extend the city's time  
12 commitment and risk. For the above reasons, City Staff urges extreme caution in considering whether to approve Addendum  
13 4. The City Council may accept, reject, or amend Addendum 4 and the Water Rights Memorandum of Understanding. If  
14 accepted or amended, they will be forwarded to Irben Development for consideration. City Staff recommends extreme  
15 caution regarding Addendum 4.

16 Relative to water shares the City serves dual roles as the "Seller" of South Jensen Park without water rights and the  
17 "Land Use Authority" requiring conveyed water rights as a condition of subdivision approval. Irben has asked the city as  
18 Seller for help providing the water rights to the Land Use Authority. Accordingly, the City Attorney has drafted the attached  
19 Memorandum of Understanding for the Council's consideration. Under this Memorandum of Understanding, Irben must  
20 convey water rights to the Land Use Authority as required by city code. This is a condition of subdivision approval.  
21 However, for the portion of any proposed subdivision that is on South Jensen Park, Irben Development may instead pay the  
22 City \$9,836.07 per acre or part thereof. The city will not deposit any such payment in the general fund or park purchase  
23 impact fund, but in the Secondary Water Operating Fund. If Irben's proposed subdivision were to develop less than an acre of  
24 South Jensen Park, it could pay \$9,836.07 instead of conveying water rights for that portion. On the other end of the  
25 spectrum, if Irben's proposed subdivision develops all of South Jensen Park, it could pay \$600,000.00 instead of conveying  
26 water rights for South Jensen Park's portion of the subdivision. Whether it pays or conveys water rights is in the discretion of  
27 Irben. This price is in accordance with the fair market value of water rights at Layton Canal Company, the irrigation company

1 that supplies water to the area surrounding South Jensen Park. Public Works Director Robert Whiteley has determined that  
2 Layton Canal water shares are one acre foot per share and are currently valued between three and four thousand dollars per  
3 share. This MOU values the water rights at under \$3,300 per acre foot. Mike Thayne of Irben has disputed the City's  
4 valuation of water shares. He indicated that he has purchased some water shares at a lower price and that  
5 several decades ago, before water rights were conveyed as a condition of subdivision approval, water shares were valued  
6 under one hundred dollars each. Nevertheless, he has agreed to enter this Memorandum of Understanding at the price  
7 indicated. The City Council may accept, reject, or amend this Memorandum of Understanding. If accepted or amended, it  
8 will be forwarded to Irben Development for consideration.

9 [8:26:08 PM](#)

10 Mr. Carlson summarized his memo.

11 [8:28:06 PM](#)

12 The Council took a break at 8:28 p.m.

13 Councilmember Lisonbee excused herself from the meeting.

14 [8:41:08 PM](#)

15 The Council work session meeting resumed and Mr. Carlson continued discussing the potential agreement with  
16 Irben Development. There was Council discussion and inquiries throughout.

17 [8:53:24 PM](#)

18 Representatives of Irben Development then provided a brief explanation of their request for the agreement. The  
19 Council directed their questions regarding the agreement to said representatives.

20 [9:10:02 PM](#)

21 Mayor Nagle suggested the Council break from the work session meeting and continue the discussion regarding the  
22 agreement in the special business meeting prior to taking action.

23  
24  
25 [9:44:52 PM](#)

26 The work session meeting resumed.

1 [9:45:02 PM](#)

2 **Discussion regarding RDA areas.**

3 City Manager Robert Rice and Finance Director Steve Marshall utilized a PowerPoint presentation to lead a  
4 discussion regarding potential improvements to the two RDA areas in Syracuse City.

5 [9:49:25 PM](#)

6 Council discussion centered on potential improvements to be made to the eastern parking area in the Town Center  
7 RDA. Consensus was to continue the discussion at a future RDA work session meeting in order to allow the RDA Board to  
8 consider improvements to the northeast parking area near Wendy's restaurant.

9 [10:04:52 PM](#)

10 Council and staff discussion then centered on potential improvements to be made in the 1700 South RDA.

11

12 [10:12:00 PM](#)

13 **Discussion regarding proposed utility rate increases.**

14 Finance Director Steve Marshall utilized a PowerPoint presentation to lead a discussion regarding a proposed utility  
15 rate increase.

16 [10:17:00 PM](#)

17 Council discussion regarding the item ensued. The Council directed staff to provide a number of options for them to  
18 consider relative to utility rate increases at the June 11, 2013.

19

20 **Discussion regarding the budget.**

21 There was no discussion regarding the budget

22

23 [10:32:33 PM](#)

24 **Council business**

25 Councilmember Duncan provided a brief report regarding the recent Memorial Day celebration event.

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The meeting adjourned at [10:37:11 PM](#) .

\_\_\_\_\_  
Jamie Nagle  
Mayor

\_\_\_\_\_  
Cassie Z. Brown, CMC  
City Recorder

Date approved: \_\_\_\_\_



# COUNCIL AGENDA

June 25, 2013

Agenda Item #3

**Recommendation of Award of Contract for  
Marilyn Drive Road Improvement Project.**

***Factual Summation***

- Please direct any questions regarding this agenda item to Public Works Director Robert Whiteley.
- Please see the attached memorandum and supporting documents regarding this agenda item.



## MEMORANDUM

**To:** Mayor and City Council

**From:** Public Works Department

**Date:** June 19, 2013

**Subject:** Bid Award for Marilyn Acres Subdivision Culinary Waterline Project Phase II

### Background:

This culinary waterline project is one that was identified on our list presented to city council as a high priority due to the age, consistent leaks and restrictions the existing 6" lines place on the system. This project will involve the replacement of an existing 6" culinary main with an 8" main at the following locations:

Marilyn Drive from Antelope Drive to Valerie Drive

Valerie Drive

Valerie Court

David Street (Portion of David will be completed with Phase I)

In addition, to help preserve the asphalt in the subdivision, new storm drain will be installed at the intersections of David Street and Dallas Street, Marilyn Drive & David Street and Marilyn Drive and Melanie Lane. Asphalt will be replaced full width on all the above mentioned streets.

Marilyn Acres Subdivision Culinary Waterline Project Phase I included culinary main replacement on a portion of David Street and was bid out separately from Phase II. The low bidder on the Phase I project was Ormond Construction, Inc. with a bid price of \$132,642.51. Phase I will use up the remaining amount left on the City's culinary water STAGG grant which expires December, 2013. Since the City was bidding these projects so late in the construction season, we were uncertain how competitive the bid prices would be. Knowing we needed to use the remainder of the STAGG grant this construction season, Phase I and II were bid separately with the anticipation if the bid prices came back higher than expected, only Phase I would be awarded this year and Phase II would be rebid next spring. Public Works is pleased with the bid results for both Phase I and II and recommends constructing both projects this year.

### Schedule:

The construction will begin as soon as contract documents are in place and will be completed by fall of 2013.

### Cost:

The bid amount for the total project for Phase II is \$645,397.45 and the funding breakdown is as follows:

	Culinary Capital	Secondary Capital	Storm Drain Capital	Class C	
<b>Total</b>	\$416,881.72	\$14,582.00	\$91,057.81	\$122,875.92	\$645,397.45
<b>Budget</b>	\$543,357.00	\$20,000.00	\$120,000.00	\$200,000.00	\$883,357.00
<b>Difference</b>	\$126,475.28	\$5,418.00	\$28,942.19	\$77,124.08	\$237,959.55

### Recommendation:

We recommend that the bid be awarded to Elden H. Knudson Construction, Inc.



June 19, 2013

Mr. Robert Rice, City Manager  
Syracuse City Corporation  
1979 West 1900 South  
Syracuse, Utah 84075

Re: Recommendation for Award of Contract  
Marilyn Acres Subdivision Culinary Waterline Project Phase II

Dear Bob:

Enclosed is the bid tabulation for the bids opened June 11, 2013 for the above referenced project. This project will install storm drain new storm drain and catch basins at the intersections of Dallas and David, Marilyn and David and Marilyn and Melanie. In addition, this project will replace the old culinary water main in Marilyn Drive, Valerie Drive, Valerie Court, David Street and Dallas Street. Full width asphalt replacement will be performed on these streets. This project will abandon old cast iron culinary mains which have historically been a consistent source of leaks.

The low bidder and bid amount are as follows:

Low Bidder: Elden H. Knudson Construction, Inc.  
2127 West 3300 South  
Ogden, Utah 84401  
Telephone: (801)-430-1034  
Bid Amount: \$645,397.45  
Engineer's Probable Cost Opinion: \$890,000.00

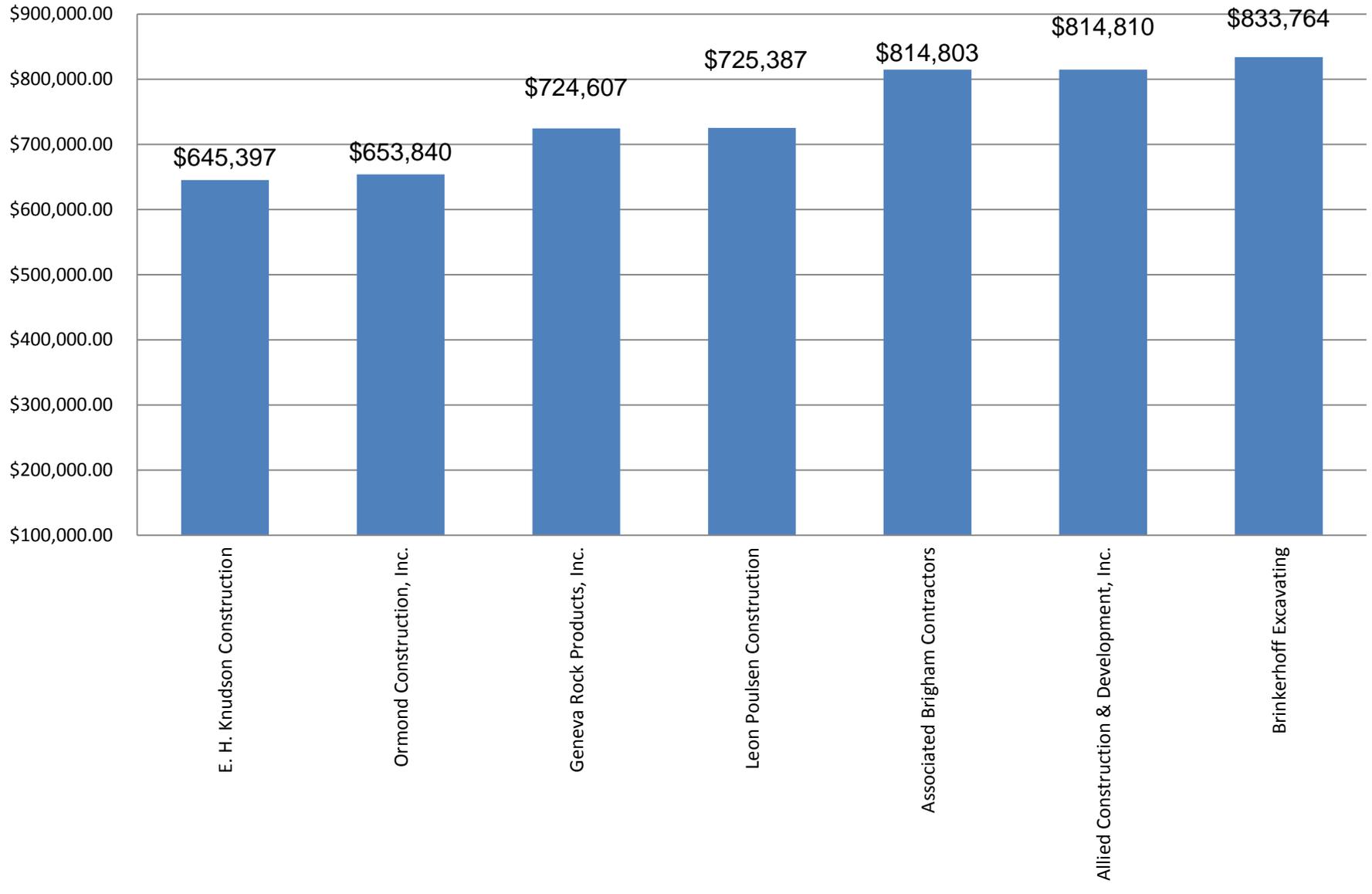
We have reviewed the submitted bid from all bidders and recommend awarding the contract to Elden H. Knudson Construction, Inc.

Sincerely,

Robert Whiteley  
Public Works Director

# Bid Tabulation

## Marilyn Acres Subdivision Culinary Waterline Project Phase II



# SYRACUSE CITY CORPORATION

## MARILYN ACRES SUBDIVISION CULINARY WATERLINE PROJECT PHASE II

LAST UPDATED:  
MARCH 9, 2013

DRAWN BY: BB



MARILYN ACRES SUBDIVISION CULINARY  
WATERLINE PROJECT PHASE II

COVER



SYRACUSE  
EST. CITY 1935

MARCH 2013

WO 2013-06

SHEET:  
1 OF 23



# COUNCIL AGENDA

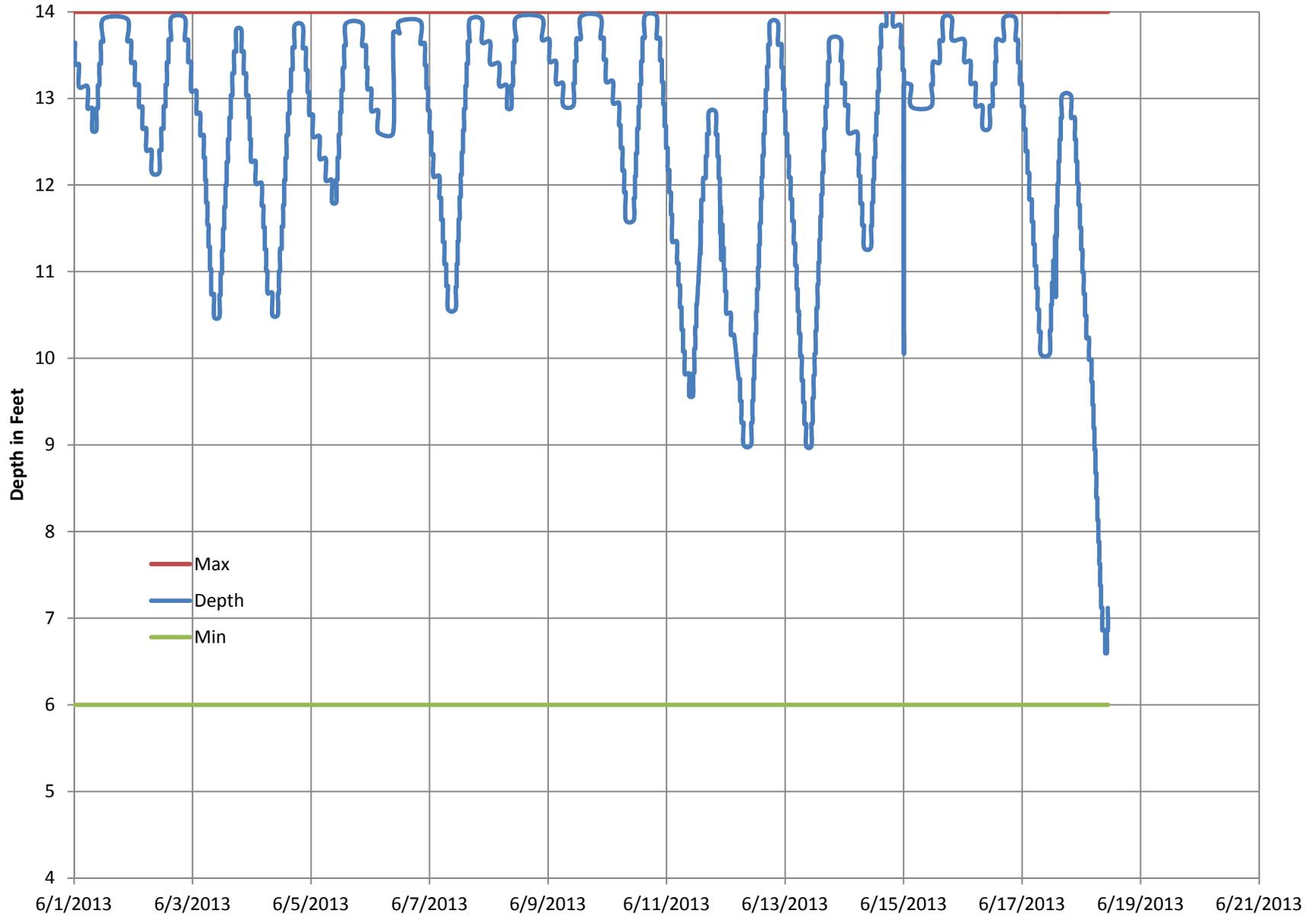
June 25, 2013

Agenda Item #4                      Status update on secondary water.

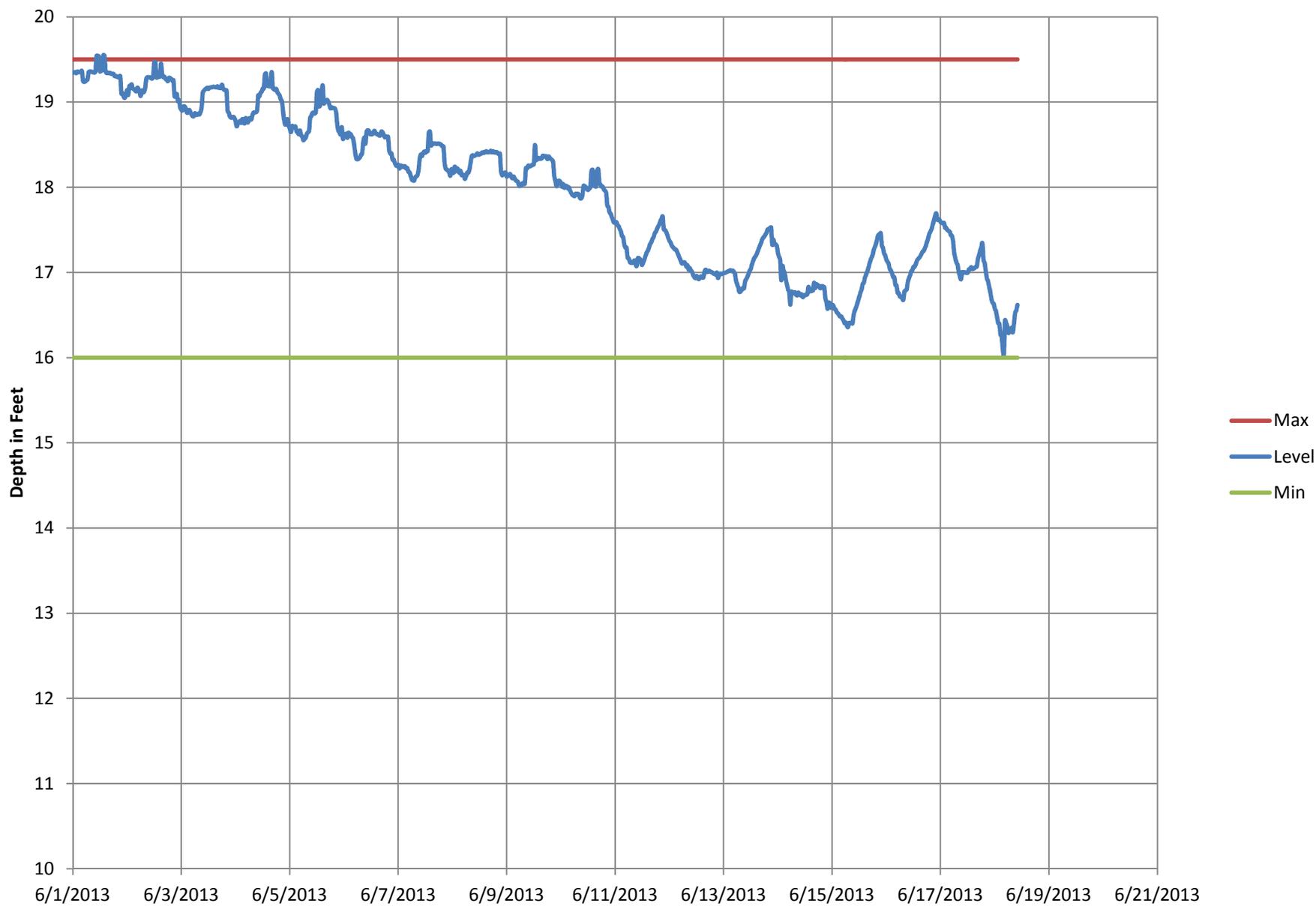
## *Factual Summation*

- Please direct any questions regarding this agenda item to Public Works Director Robert Whiteley.
- Please see the attached graphs which have charted the City's reservoir levels from June 1 to June 19, 2013. Also included are graphs on the history of precipitation and temperatures since 2010 to 2013.
- During the May 14, 2013 Council Meeting, Davis and Weber Counties Canal Company did a presentation on conserving water and staff proposed Ordinance 13-06 in support of the effort. The Council tabled it in favor of allowing citizens to monitor their own water usage by following a voluntary watering schedule. Please see the included agenda item information from the meeting on the 14<sup>th</sup>.
- The public has been notified of the needs to conserve secondary water and follow a watering schedule by the following methods:
  - A notice was mailed with the June Utility bill.
  - Emails were sent to those who are signed up for automatic bill payments.
  - A newsletter article is prepared to be sent out in the July/August newsletter.
  - An article is on the city website.
  - A post was made on the city's facebook page.
  - Banners have been posted around the city.
  - Notices have been posted at all city buildings.

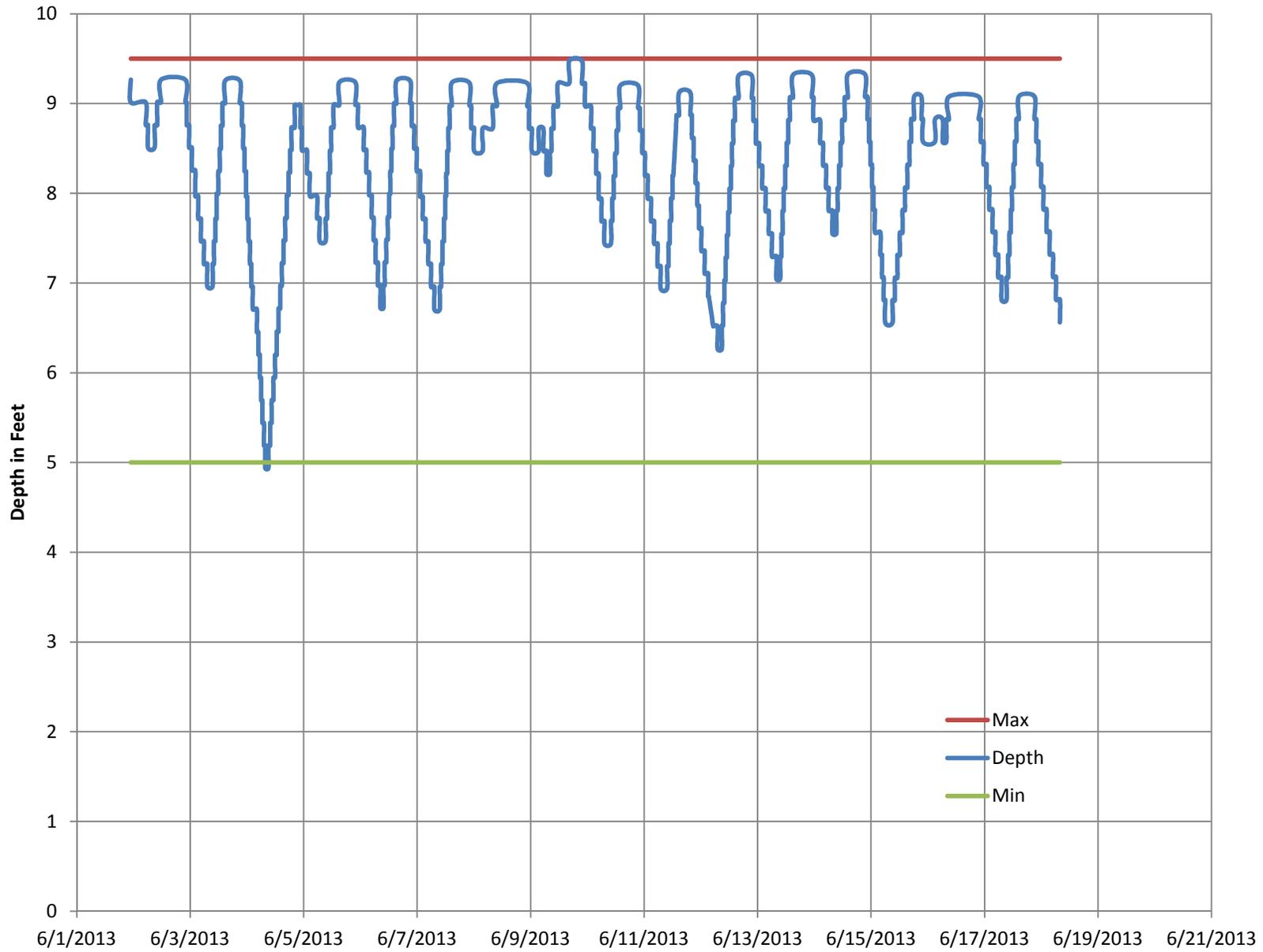
# Syracuse Freeport Reservoir



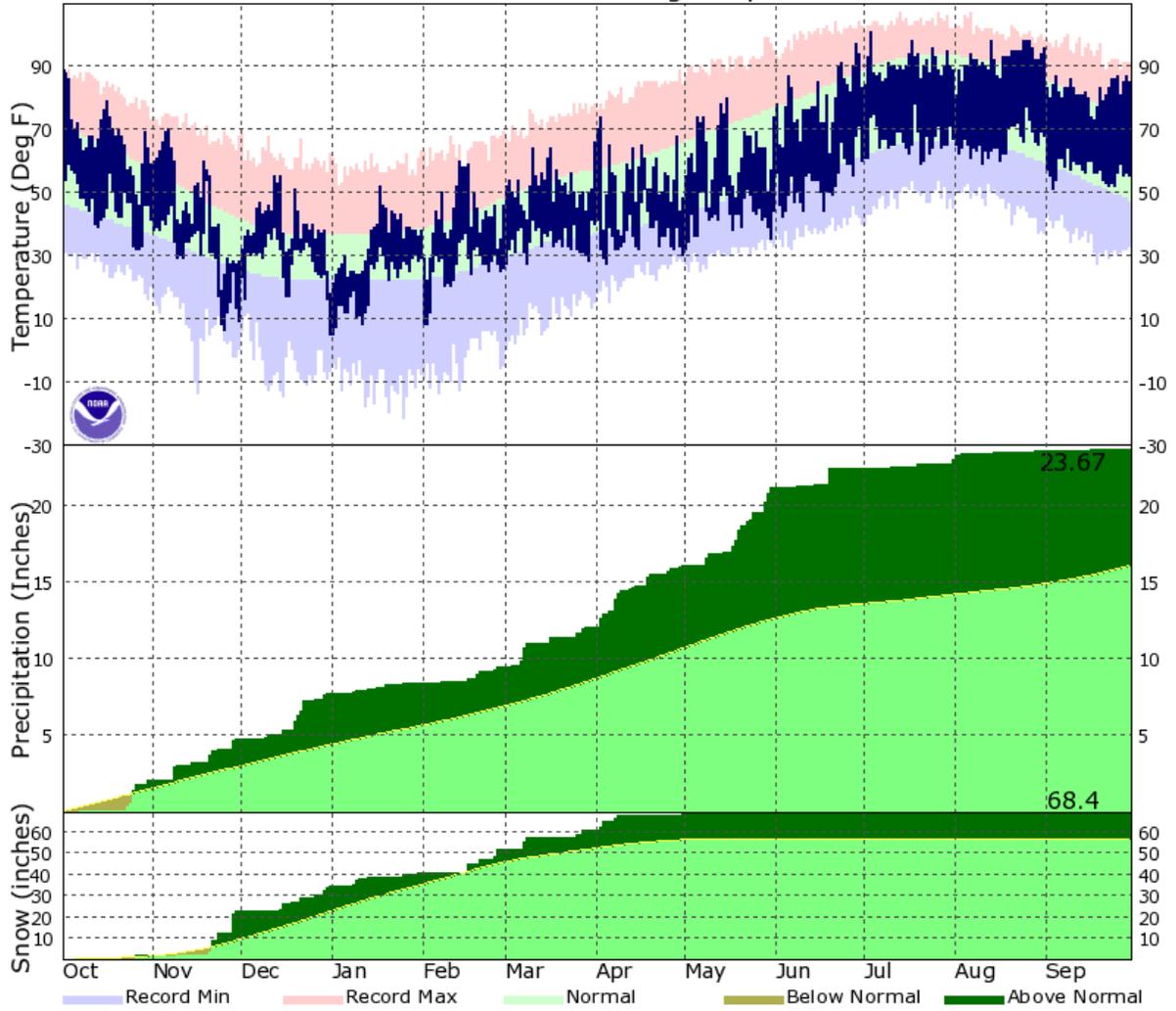
# Syracuse Jensen Pond



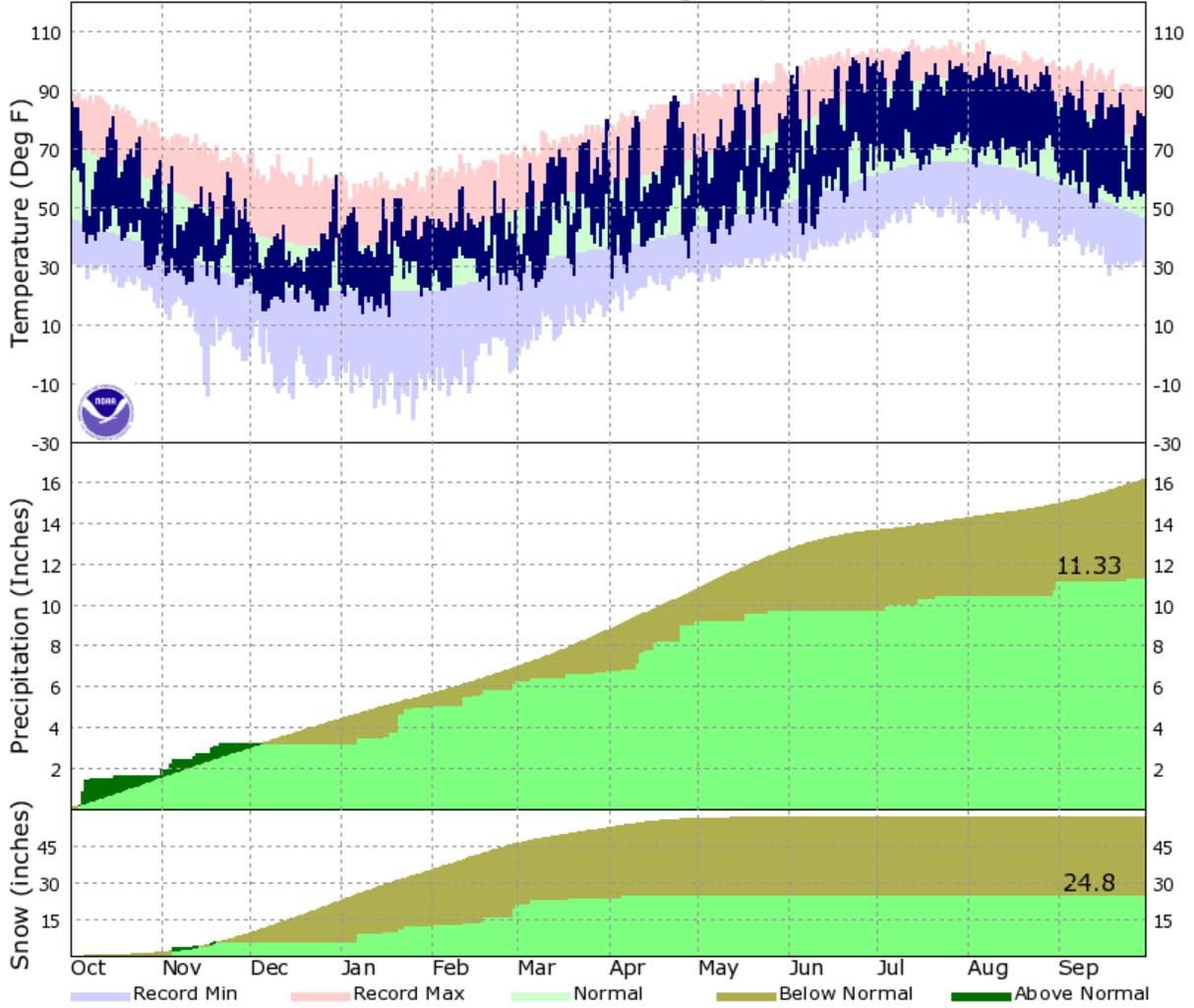
# Syracuse Bluff Pond



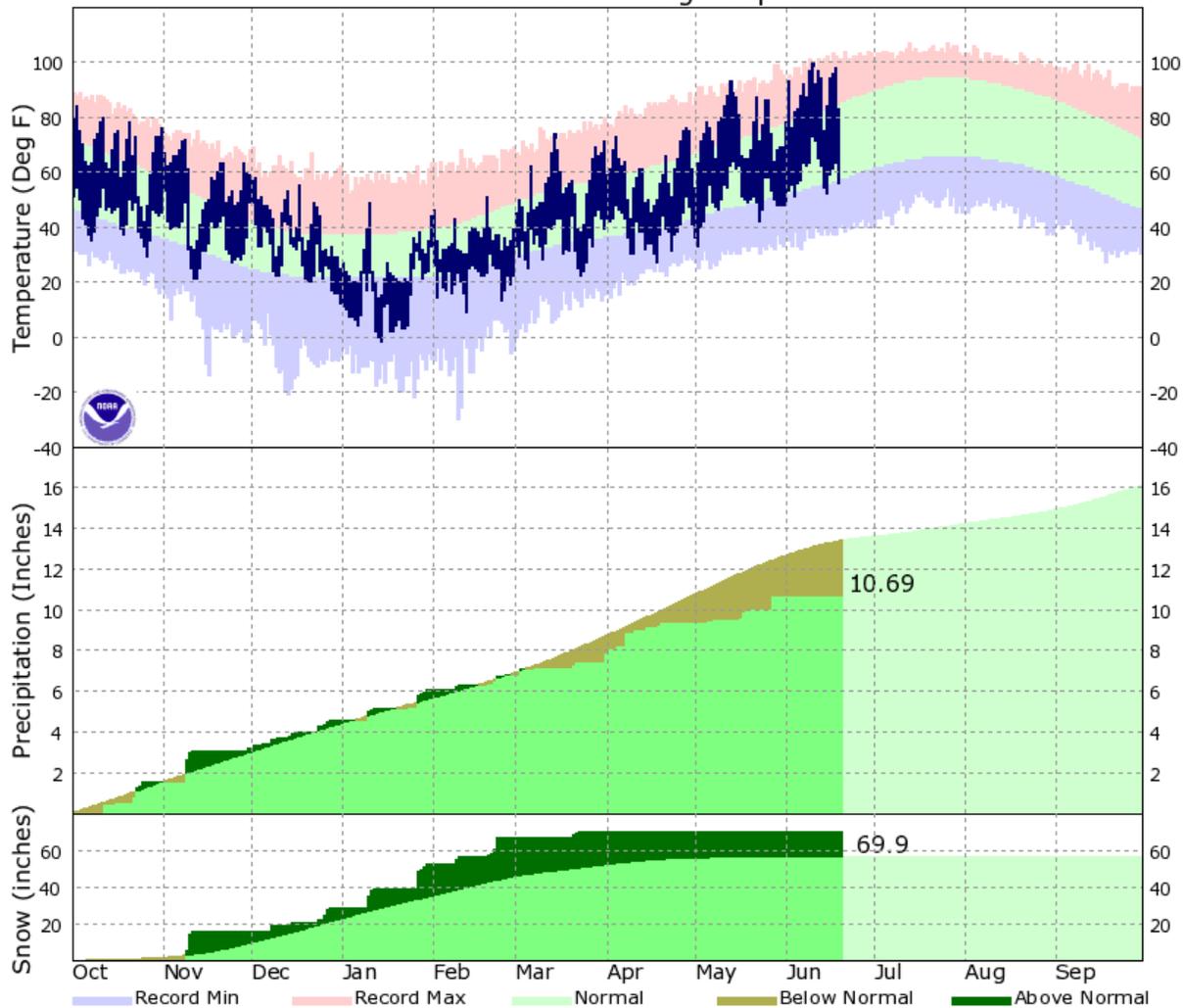
### KSLC - Oct 2010 Through Sep 2011



### KSLC - Oct 2011 Through Sep 2012



### KSLC - Oct 2012 Through Sep 2013



Data acquired from National Oceanic and Atmospheric Administration, National Weather Service Forecast Office, Salt Lake City, Utah









# COUNCIL AGENDA

May 14, 2013

Agenda Item

## **Secondary Water Supply Shortage**

Presentation by Ivan Ray, General Manager, Davis and Weber Counties Canal Company

### ***Factual Summation***

- This presentation will be a summary of a meeting recently held at the irrigation company on May 1, 2013.
- The company, which provides secondary water to communities in Weber and Davis counties, is asking people to water twice a week on specific days for only 20-30 minutes per station. It is also asking people to follow a system of watering based on the last digit in their address. The canal system serves Layton, Kaysville, Roy, West Point, South Weber, Syracuse and Clinton.



**Mayor**  
Jamie Nagle

**City Council**  
Brian Duncan  
Craig Johnson  
Karianne Lisonbee  
Douglas Peterson  
Larry D. Shingleton

## MEMORANDUM

**To:** Mayor and City Council  
**From:** City Attorney, William J. Carlson  
**Date:** May 14, 2013  
**Subject:** Water Shortage Options

---

### Summary

The Davis & Weber Counties Canal Company, the primary supplier to Syracuse' irrigation ("secondary") water system, announced that 2013 water shortages require it to drastically limit water distribution. Customers can expect to receive 25% to 40% less water this year than in previous years. Since Syracuse operates its own secondary water system, the City has a choice in how to impose this reduction on the residents of Syracuse. Even so, the City should plan to have only 60% of last year's water to meet the secondary water needs of residents and visitors during this irrigation season. This requires the City to promptly implement some form of water conservation.

Traditionally, municipal water conservation efforts have focused on prescriptive regulations, such as rationing water for specific uses or requiring installation of specific appliances or infrastructure. Recent research suggests that market-based policies (charge higher rates for more use and lower rates for less use) are the most cost effective way to conserve, while prescriptive regulations are better at reaching a specific conservation level. *See "Comparing price and nonprice approaches to urban water conservation,"* Water Resources Research, Volume 45, W04301 (attached). Since Syracuse has thus far declined to meter secondary water, it does not currently have an option of a market-based conservation strategy.

In the short term, rationing is the only viable conservation strategy available to the City. There are several approaches to water rationing, but most require a metered system. One approach that does not require meters is to restrict the uses to which water can be put, without specifically restricting the

amount of water that a home can use. This approach usually is accompanied by a fine or possibly a brief jail sentence for violations. A typical ordinance in this strategy would be one prohibiting using sprinklers at all, or permitting sprinkling a lawn only during certain hours on certain days of the week.

For longer term solutions, other options for water conservation include: encouraging gray water systems, requiring installation of moisture detectors and other water conserving technologies, or market driven strategies using meters. Each of these strategies take time to fully implement and are unlikely to have a significant impact on the 2013 irrigation season, but should be considered by the Council to address the long term water needs of the City.

Attached are three ordinances for immediate consideration by the Council: "Tucson," "St. John's River," and "Ivory Tower." Tucson is an emergency water conservation ordinance based on one adopted in Arizona municipalities. It allows the city to declare a water emergency and prohibit certain water uses within city limits during the emergency. St. John's River is an ordinance encouraged by water management districts in Florida, limiting the days and times that watering can occur. Ivory Tower is a model ordinance written by attorneys and law professors that contains elements of both Tucson and St. Johns as well as other additions. Adopting any of these ordinances will provide tools to the City during this and future drought years.

The City Attorney recommends the City Council select one or more of these ordinances for public hearing and adoption at the next meeting of the City Council on May 28, 2013.

#####



## Comparing price and nonprice approaches to urban water conservation

Sheila M. Olmstead<sup>1</sup> and Robert N. Stavins<sup>2,3,4</sup>

Received 17 June 2008; revised 23 January 2009; accepted 12 March 2009; published 25 April 2009.

[1] Urban water conservation is typically achieved through prescriptive regulations, including the rationing of water for particular uses and requirements for the installation of particular technologies. A significant shift has occurred in pollution control regulations toward market-based policies in recent decades. We offer an analysis of the relative merits of market-based and prescriptive approaches to water conservation, where prices have rarely been used to allocate scarce supplies. The analysis emphasizes the emerging theoretical and empirical evidence that using prices to manage water demand is more cost effective than implementing nonprice conservation programs, similar to results for pollution control in earlier decades. Price-based approaches may also compare favorably to prescriptive approaches in terms of monitoring and enforcement. Neither policy instrument has an inherent advantage over the other in terms of predictability and equity. As in any policy context, political considerations are also important.

**Citation:** Olmstead, S. M., and R. N. Stavins (2009), Comparing price and nonprice approaches to urban water conservation, *Water Resour. Res.*, 45, W04301, doi:10.1029/2008WR007227.

### 1. Introduction

[2] Cities around the world struggle to manage water resources in the face of population increases, consumer demand for water-intensive services, and increasing costs (including environmental costs) of developing new supplies. In this paper, we provide an economic perspective on reducing urban water demand through pricing and non-price conservation policies. We compare price and nonprice approaches along five dimensions: the ability of policies to achieve water conservation goals, cost effectiveness, distributional equity, monitoring and enforcement, and political feasibility.

[3] Municipal water consumption comprises only about 12% of total freshwater withdrawals in the United States, and agricultural irrigation, the single largest water use, comprises just over one third of all withdrawals [Hutson *et al.*, 2004]. While analysis suggests that reallocating water from agriculture to cities would be efficient in many regions, in the current legal and political setting, large-scale transfers of water rights from agriculture to cities are uncommon [Brewer *et al.*, 2007; Brown, 2006; Howe, 1997]. Thus, cities often must reduce water consumption during acute shortages due to drought, or in the long run because of constraints on their ability to increase supply.

[4] The efficient water price is the long-run marginal cost (LRMC) of supply in most cases, though in some cases charging short-run marginal cost may be efficient [Russell

and Shin, 1996a]. LRMC reflects the full economic cost of water supply: the cost of transmission, treatment and distribution; some portion of the capital cost of current reservoirs and treatment systems, as well as those future facilities necessitated by current patterns of use; and the opportunity cost in both use and nonuse value of water for other potential purposes. Urban water prices lie well below LRMC in many countries [Sibly, 2006; Timmins, 2003; Renzetti, 1999; Munasinghe, 1992], with significant economic costs [Renzetti, 1992b; Russell and Shin, 1996b]. In the short run, without price increases acting as a signal, water consumption proceeds during periods of scarcity at a faster-than-efficient pace. Water conservation takes place only under “moral suasion or direct regulation” [Gibbons, 1986, p. 21]. In contrast, if water prices rose as reservoir levels fell, consumers would respond by using less water, reducing or eliminating uses according to their preferences. In the long run, inefficient prices alter land use patterns and industrial location decisions. The sum of all these individual decisions affects the sustainability of local and regional water resources.

[5] Implementation of efficient water prices would be challenging. Some of the opportunity costs of urban water supply are difficult to quantify. What is the value of a gallon of water left in stream to support endangered species habitat, for example? While economists have developed a variety of useful methods for estimating such values, the expectation that every water supplier will develop measures of the LRMC of water supply, including the opportunity cost of leaving water in stream, is unrealistic. This is complicated by the known problems with so-called “benefit transfer,” the practice of using resource values estimated for one ecosystem in other locations. LRMC represents a critical water pricing goal, but it is not the focus of this paper. There are smaller, less ambitious steps toward efficiency that may be accomplished more readily.

<sup>1</sup>Yale School of Forestry and Environmental Studies, New Haven, Connecticut, USA.

<sup>2</sup>Harvard Kennedy School, Harvard University, Cambridge, Massachusetts, USA.

<sup>3</sup>National Bureau of Economic Research, Cambridge, Massachusetts, USA.

<sup>4</sup>Resources for the Future, Washington, D. C., USA.

[6] Various policies can be employed to achieve the conservation of a particular quantity of water, some more costly than others. Here we use water conservation in its familiar meaning, rather than an economic definition, which would require true conservation of resources (with benefits exceeding costs) [Baumann *et al.*, 1984]. Choosing the least costly method of achieving a water conservation goal is characterized in economic terms as cost-effective water management. Even if the goal is inefficient, society can benefit from the minimization of costs to achieve it.

[7] We focus on this issue of policy instrument choice for water conservation, summarizing research from the economics literature. Given the strong theoretical cost advantages of market-based approaches to water conservation over conventional alternatives, and the emerging empirical evidence for the potential cost savings from moving to market-based approaches, the time is ripe for a discussion of the relative strengths and weaknesses of these policy instruments.

## 2. Cost Effectiveness of Water Conservation Policies

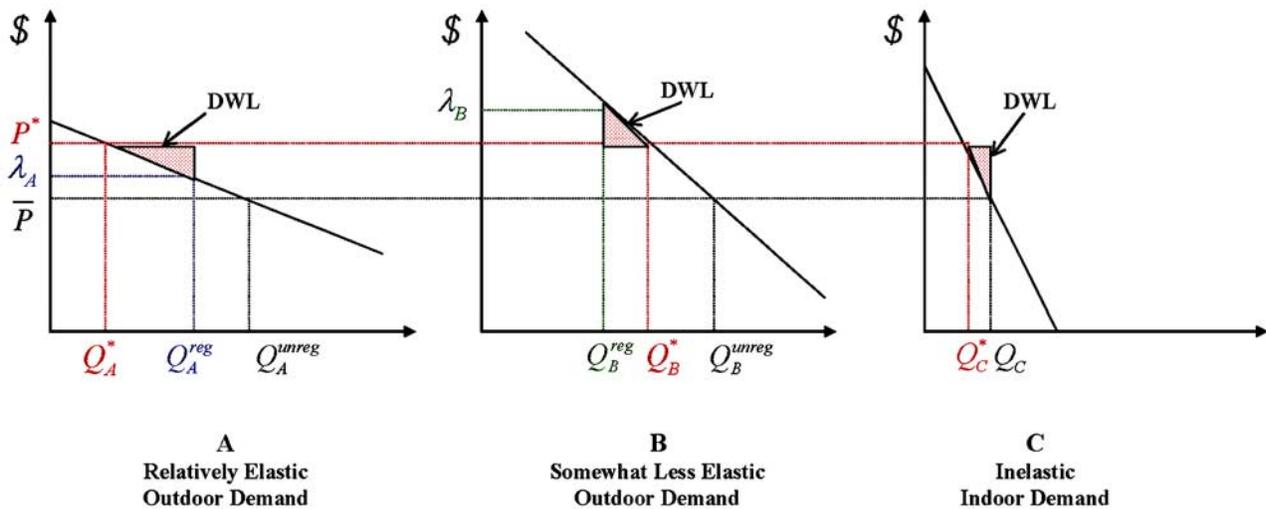
[8] Decades of theoretical and empirical economic analysis suggest that market-based environmental policies are more cost effective than conventional policies, often characterized as prescriptive or command-and-control (CAC) approaches. Market-based regulations encourage behavior through market signals rather than through explicit directives to individual households and firms regarding conservation levels or methods. These policy instruments set an aggregate standard and allow firms and households to undertake conservation efforts that are in their own interests and collectively meet the aggregate standard. CAC approaches, in contrast, allow less flexibility in the means of achieving goals and often require households or firms to undertake similar shares of a conservation burden regardless of cost. Some CAC approaches to environmental policy are more cost effective than others, and the more flexible CAC approaches may compare favorably with market approaches in some cases. In water conservation, however, the most common CAC approaches are rationing (e.g., outdoor watering restrictions) in the short run, and technology standards (e.g., low-flow fixture requirements) in the long run. Both approaches are among the least flexible of CAC policies, and both can be expected to generate significant economic losses.

[9] In the area of pollution control, the cost-effectiveness advantage of market-based approaches over CAC policies has been demonstrated theoretically [Pigou, 1920; Crocker, 1966; Dales, 1968; Montgomery, 1972; Baumol and Oates, 1988] and empirically [Keohane, 2007; Teitenberg, 2006]. The best known application of these principles to environmental regulation is the U.S. SO<sub>2</sub> trading program, established under Title IV of the Clean Air Act Amendments of 1990, which has produced cost savings on the order of \$1 billion annually [Stavins, 2003]. Dozens of other market-based policies have been applied to air and water pollution control, fisheries management, and other environmental problems in industrialized and developing countries [Kolstad and Freeman, 2007; Stavins, 2003; Sterner, 2003; Panayotou, 1998].

[10] Economists have only recently begun to measure the potential economic gains from adopting market-based approaches to water conservation. Recent studies demonstrate how raising prices, rather than implementing nonprice policies, can substantially reduce the economic cost of achieving water consumption reductions in theory. Collinge [1994] proposes a municipal water entitlement transfer system and demonstrates that this can reduce costs significantly over a CAC approach. An experimental study simulates water consumption from a common pool and predicts that consumer heterogeneity generates economic losses from CAC water conservation policies [Krause *et al.*, 2003]. Brennan *et al.* [2007] construct a household production model that suggests efficiency losses will result from outdoor watering restrictions.

[11] To illustrate the basic economics, we examine one typical CAC approach to water conservation, a citywide restriction on outdoor uses, uniform across households. Figure 1 portrays two households with the same indoor demand curves, but different preferences for outdoor water use. The difference in slopes of the three demand curves is associated with differences in elasticity, the percentage drop in demand prompted by a one percent price increase. (For all but one specific class of demand function, price elasticity varies along the demand curve, thus while we can speak broadly about comparisons across demand curves, there are points on a relatively steep demand curve at which price elasticity exceeds that on some parts of a flat demand curve.) Here we assume that indoor demand (Figure 1c), the steepest curve, is inelastic, because indoor uses are less easily reduced in response to price changes, reflecting the basic needs met by indoor water use. For outdoor demand, there is a relatively elastic household (Figure 1a), and a somewhat less elastic household (Figure 1b). Household A will reduce outdoor demand relatively more in response to a price increase, perhaps because it has weaker preferences for outdoor consumption (e.g., in the short run, it would rather allow the lawn to turn brown than pay a higher water bill to keep it green).

[12] Unregulated, at price  $\bar{P}$ , both households consume  $Q_C$  water indoors, household B consumes  $Q_B^{unreg}$  outdoors, and household A consumes  $Q_A^{unreg}$  outdoors. The outdoor reduction mandated under a CAC approach (which leaves indoor use unchanged, and reduces outdoor uses to  $Q_B^{reg}$  and  $Q_A^{reg}$ ) creates a “shadow price” for outdoor consumption ( $\lambda$ ) that is higher under the current marginal price ( $\bar{P}$ ) for household B than for A, because household B is willing to pay more than A for an additional unit of water. If instead the water supplier charges price  $P^*$ , that achieves the same aggregate level of water conservation as the CAC approach, consumers would realize all potential gains from substitution within and across households, erasing the shaded deadweight loss triangles. Consumption moves to  $Q_C^*$  indoors for both types of households, and to  $Q_A^*$  and  $Q_B^*$  outdoors. The savings from the market-based approach are driven by two factors: (1) the ability of households facing higher prices rather than quantity restrictions to decide which uses to reduce according to their own preferences and (2) allowing heterogeneous responses to the regulation across households, resulting in substitution of scarce water from those households who value it less, to those who value it more.



(Where  $P^*$  is the market-clearing price for  $Q_A^{reg} + Q_B^{reg} + Q_C = Q_A^* + Q_B^* + Q_C^*$ ).

**Figure 1.** Economic losses from outdoor consumption restrictions with heterogeneous outdoor demand: (a) relatively elastic outdoor demand, (b) somewhat less elastic outdoor demand, and (c) inelastic indoor demand.

[13] Rationing approaches to water conservation are ubiquitous. During a 1987–1992 drought in California, 65–80% of urban water utilities implemented outdoor watering restrictions [Dixon *et al.*, 1996]. In 2008, 75% of Australians live in communities with some form of mandatory water use restrictions [Grafton and Ward, 2008]. Long-run water conservation policies are often technology standards. Since 1992, the National Energy Policy Act has required that all new U.S. construction install low-flow toilets, showerheads, and faucets. Many municipal ordinances mandate technology standards more stringent than the national standards [U.S. General Accounting Office, 2000].

[14] How large are the losses from nonprice demand management approaches? Four analyses have estimated the economic losses from CAC water conservation policies. Timmins [2003] compared a mandatory low-flow appliance regulation with a modest water price increase, using data from 13 groundwater-dependent California cities. Under all but the least realistic of assumptions, he found prices to be more cost effective than technology standards in reducing groundwater aquifer lift height in the long run.

[15] A study of 11 urban areas in the United States and Canada compared residential outdoor watering restrictions with drought pricing in the short run [Mansur and Olmstead, 2007]. For the same aggregate demand reduction as that implied by a 2-day-per-week outdoor watering restriction, a market-clearing price would result in gains of about \$81 per household per summer, about one quarter of the average household's total annual water bill in the study. Brennan *et al.* [2007] arrived at similar short-run conclusions; the economic costs of a 2-day-per-week sprinkling restriction in Perth, Australia are just under \$100 per household per season, and the costs of a complete outdoor watering ban range from \$347 to \$870 per household per season. (Under the sprinkling restriction, watering by hand was allowed, so the policy was a technology standard.)

Mandatory water restrictions in Sydney, Australia over a single year in 2004–2005 resulted in economic losses of \$235 million, or about \$150 per household, about one half the average Sydney household water bill in that year [Grafton and Ward, 2008].

[16] On the basis of both economic theory and the emerging empirical estimates, the inescapable conclusion is that using price increases to reduce demand, allowing consumers to adjust their end uses of water, is more cost effective than implementing nonprice demand management programs. This holds true empirically in both the short and the long run. In the long run, price increases provide stronger incentives for the development and adoption of new water conservation technologies, since households and firms stand to save more on water costs from adopting such technologies when water is more expensive. With higher prices, water users choose the technology that provides the desired level of water conservation, given their preferences or production technologies, in return for the lowest investment cost. Technology standards can actually dampen incentives to innovate, locking in whatever is state-of-the-art when the standard is passed. This is an effect that is well documented for pollution control regulations [Downing and White, 1986; Milliman and Prince, 1989; Keohane, 2005], but has not been considered in the literature on water conservation.

### 3. Predictability in Achieving Water Conservation Goals

#### 3.1. Effects of Price on Water Demand

[17] If policymakers are to use prices to manage demand, the key variable of interest is the price elasticity of water demand. An increase in the water price leads consumers to use less of it, all else equal, so price elasticity is a negative number. An important benchmark elasticity is  $-1.0$ ; this

threshold divides demand into the categories of elastic and inelastic. There is a critical distinction between “inelastic demand” and demand which is “unresponsive to price.” If demand is truly unresponsive to price, price elasticity is equal to zero, and the demand curve is a vertical line, the same quantity of water will be demanded at any price. This may be true for a subsistence quantity of drinking water, but it has not been observed for urban water demand more broadly in 50 years of empirical economic analysis.

[18] Residential water demand is inelastic at current prices. In a meta-analysis of 124 estimates generated between 1963 and 1993, accounting for the precision of estimates, *Espey et al.* [1997] obtained an average price elasticity of  $-0.51$ , a short-run median estimate of  $-0.38$ , and a long-run median estimate of  $-0.64$ . Likewise, *Dalhuisen et al.* [2003] obtained a mean price elasticity of  $-0.41$  in a meta-analysis of almost 300 price elasticity studies, 1963–1998. The price elasticity of residential water demand varies across place and time, but on average, in the United States, a 10% increase in the marginal price of water in the urban residential sector can be expected to diminish demand by about 3–4% in the short run. This is similar to empirical estimates of the price elasticity of residential energy demand [*Bohi and Zimmerman*, 1984; *Bernstein and Griffin*, 2005]. With an elasticity of  $-0.4$ , if a water utility wanted to reduce demand by 20% (not an uncommon goal during a drought), this could require approximately a 50% increase in the marginal water price.

[19] Industrial price elasticity estimates for water tend to be higher than residential estimates and vary by industry. The literature contains only a handful of industrial elasticity estimates. The results of five studies, 1969–1992, are reported by *Griffin* [2006], ranging from  $-0.15$  for some two-digit SIC codes [*Renzetti*, 1992a], to  $-0.98$  for the chemical manufacturing industry [*Ziegler and Bell*, 1984]. A study of 51 French industrial facilities estimates an average demand elasticity of  $-0.29$  for piped water, with a range of  $-0.10$  to  $-0.79$ , depending on industry type [*Reynaud*, 2003].

[20] There are some important caveats worth mentioning. First, any estimate represents an elasticity in a specific range of prices. Were prices to approach the efficient levels discussed earlier, water demand would likely be much more sensitive to price increases. Second, consumers and firms are relatively more sensitive to water prices in the long run than in the short run, because in the long run capital investments are not fixed. Households might replace appliances, retrofit water-using fixtures, or landscape with drought-tolerant plants; firms may change water-consuming technologies, increase recycling, or relocate to areas in which water is more plentiful. In the long run, a 10% price increase can be expected to decrease residential demand by about 6%, almost twice the average short-run response [*Espey et al.*, 1997].

[21] Third, price elasticities vary with many other factors. In the residential sector, high-income households tend to be much less sensitive to water price increases than low-income households. Similarly, industrial water demand elasticity is higher for industries in which the cost share of water inputs is larger [*Reynaud*, 2003]. Price elasticity may increase when price information is posted on water bills [*Gaudin*, 2006], and it may be higher under increasing-

block tariffs (in which the marginal volumetric water price increases with consumption) than under uniform volumetric prices [*Olmstead et al.*, 2007]. Price elasticities must be interpreted in the context in which they have been derived, thus, for the impact of a price increase to achieve a predictable demand reduction, individual utilities must estimate a price elasticity for their own current customer base.

[22] If water suppliers seek to reduce demand in the long run by raising prices, a price elasticity for their customer base may be all that they need to achieve predictability. To generate such an estimate for the residential sector, they would need, at a minimum, detailed data on water consumption, household income, and marginal water prices over a period in which prices have varied sufficiently to allow the estimation of the relationship between price and demand. An even better estimate would require data on weather, as well as household characteristics that serve as proxies for water consumption preferences, things like the size of families, homes, and lots. Estimating industrial elasticities is much more complicated [*Renzetti*, 2002]; with few industrial estimates in the literature, this is an important focus for future research in the economics of urban water conservation.

[23] Reducing demand through pricing in the short run may require additional detail. For example, seasonal elasticities are useful if utilities want to use prices to reduce peak summer demand. If prices are to be increased on subsets of the full customer base, then elasticities for those particular classes of households or industries must be estimated in order to achieve the desired demand impact. Needless to say, where water consumption is not metered, price cannot be used to induce water conservation. Where information on water consumption, prices, income and other factors is insufficient to estimate a local elasticity, price may still be used as a water conservation policy (perhaps using elasticity estimates from the literature as a guide), but with unpredictable results.

### 3.2. Effects of Nonprice Conservation Programs on Water Demand

[24] Historically, water suppliers have relied on nonprice conservation programs to induce demand reductions during shortages. We consider the effects of such nonprice programs in three categories: (1) required or voluntary adoption of water-conserving technologies, (2) mandatory water use restrictions, and (3) mixed nonprice conservation programs. These policies have primarily targeted residential customers, so this is the focus of our discussion.

#### 3.2.1. Water-Conserving Technology Standards

[25] When the water savings from technology standards have been estimated, they have often been smaller than expected because of behavioral changes that partially offset the benefit of greater technical efficiency. For example, households with low-flow showerheads may take longer showers [*Mayer et al.*, 1998]. The “double flush” was a notorious difficulty with early models of low-flow toilets. In a recent field trial, randomly selected households had their top-loading clothes washers replaced with front-loading models. The average front-loading household increased clothes washing by 5.6%, perhaps because of the cost savings associated with increased efficiency [*Davis*,

2008]. This “rebound effect” has been demonstrated for energy demand, as well [Greening *et al.*, 2000].

[26] Several engineering studies have observed a small number of households in a single region to estimate the water savings associated with low-flow fixtures. One study indicates that households fully constructed or retrofitted with low-flow toilets used about 20 percent less water than households with no low-flow toilets. The equivalent savings reported for low-flow showerheads was 9 percent [Mayer *et al.*, 1998]. Careful studies of low-flow showerhead retrofit programs in the East Bay Municipal Utility District, California, and Tampa, Florida estimate water savings of 1.7 and 3.6 gallons per capita per day (gpcpd), respectively [Aher *et al.*, 1991; D. L. Anderson *et al.*, The impact of water conserving fixtures on residential water use characteristics in Tampa, Florida, paper presented at Conserv93, American Water Works Association, Las Vegas, Nevada, 1993]. In contrast, showerhead replacement had no statistically significant effect in Boulder, Colorado [Aquacraft *Water Engineering and Management*, 1996]. Savings reported for low-flow toilet installation and rebate programs range from 6.1 gpcpd in Tampa, Florida to 10.6 gpcpd in Seattle, Washington [U.S. General Accounting Office, 2000]. Renwick and Green [2000] estimate no significant effect of ultra low-flush toilet rebates in Santa Barbara, California.

### 3.2.2. Mandatory Water Use Restrictions

[27] Mandatory water use restrictions may limit the total quantity of water that can be used or restrict particular water uses. Empirical evidence regarding the effects of these programs is mixed. Summer 1996 water consumption restrictions in Corpus Christi, Texas, including prohibitions on landscape irrigation and car washing, did not prompt statistically significant water savings in the residential sector [Schultz *et al.*, 1997]. A longer-term program in Pasadena, California resulted in aggregate water savings [Kiefer *et al.*, 1993], as did a program of mandatory water use restrictions in Santa Barbara, California [Renwick and Green, 2000].

### 3.2.3. Mixed Nonprice Conservation Programs

[28] Water utilities often implement multiple nonprice conservation programs simultaneously. One analysis of the effect of conservation programs on aggregate water district consumption in California found small but significant reductions in total water use attributable to landscape education programs and watering restrictions, but no effect due to indoor conservation education programs, low-flow fixture distribution, or the presentation of conservation information on customer bills [Corral, 1997]. The number of conservation programs in place in California cities may have a small negative impact on total residential water demand [Michelsen *et al.*, 1998]. Public information campaigns, retrofit subsidies, water rationing, and water use restrictions had negative and statistically significant impacts on average monthly residential water use in California, and the more stringent policies had stronger effects than voluntary policies and education programs [Renwick and Green, 2000].

### 3.2.4. Summing up the Predictability Comparison

[29] Predictability of the effects of a water conservation policy may be of considerable importance to water suppliers. If certainty over the quantity of conservation to be achieved is required, economic theory would suggest that

quantity restrictions are preferred to price increases. A price-based approach, in contrast, provides greater certainty over compliance costs [Weitzman, 1974]. However, this assumes that suppliers can rely on compliance with quantity-based restrictions. In a comprehensive study of drought management policies among 85 urban water utilities during a prolonged drought in southern California, 40 agencies adopted mandatory quantity restrictions, but that more than half of customers violated restrictions [Dixon *et al.*, 1996]. Such nonbinding quantity constraints are common. In the same study, about three quarters of participating urban water agencies implemented type-of-use restrictions (most of them mandatory). Few penalties were reported, and enforcement was weak, again raising questions regarding compliance. Neither price nor nonprice demand management programs have an advantage in terms of predicting water demand reductions. For each type of policy, the key to predictability is the existence of high-quality, current statistical estimates of the impacts of similar measures (price increases or nonprice policies), for a utility’s own customers.

## 4. Equity and Distributional Considerations

[30] The main distributional concern with a market-based approach to urban water management arises from the central feature of a market: allocation of a scarce good by willingness to pay (WTP). Under some conditions, WTP may be considered an unjust allocation criterion. The sense that some goods and services should not be distributed by markets in particular contexts explains the practice of wartime rationing, for example. A portion of water in residential consumption is used for basic needs, such as drinking and bathing. “Lifeline” rates and other accommodations ensuring that water bills are not unduly burdensome for low-income households are common. Thus, policy-makers considering market-based approaches to water management must be concerned about equity in policy design.

[31] What does economic theory tell us about the equity implications of water pricing as a conservation tool? If water demand management occurs solely through price increases, low-income households will contribute a greater fraction of a city’s aggregate water savings than high-income households, in part because price elasticity declines with the fraction of household income spent on a particular good. The empirical evidence supports this conclusion. Agthe and Billings [1987] found that low-income households exhibited a larger demand response to price increases in Tucson, Arizona. Renwick and Archibald [1998] found that low-income households in southern California communities were more price responsive than high-income households. Mansur and Olmstead [2007] found that raising prices to reduce consumption would cause a greater consumption reduction for low-income than for high-income households.

[32] The fact that price-based approaches reduce water consumption more among poor households than rich ones does not mean these policies are regressive, or conversely that nonprice policies are progressive. Some nonprice policies are clearly progressive. For example, a landscape irrigation technology standard imposes costs mainly among high-income households [Renwick and Archibald, 1998]. But the distributional impact of most nonprice programs

depends on how they are financed. And progressive price-based approaches to water demand management can be designed by returning utility profits (from higher prices) in the form of rebates. In the case of residential water users, this could occur through the utility billing process.

[33] Drought pricing, like LRMC pricing, would cause utilities to earn substantial short-run profits. In the case of LRMC pricing, short-run profits are earned because LRMC is increasing; suppliers tap the cheapest supplies first (e.g., those closest geographically to the cities they serve) [Hanemann, 1997]. With drought pricing, price increases reflecting scarcity reduce demand, but because demand is inelastic, total revenues increase. Water utilities' rate of return is typically regulated. The increase in revenues from drought pricing may drive rates of return above regulated maximums. Such profits could be avoided if water managers implemented household-level trading through a centralized credit market managed by the water utility, as proposed by Collinge [1994], although transaction costs in this approach may be high. With drought pricing, profits could be reallocated on the basis of any measure that is not tied to current consumption. Such a rebate policy would retain the strong economic incentive benefits of drought pricing relative to CAC approaches, without imposing excessive burdens on low-income households [Mansur and Olmstead, 2007]. A rebate based on a household's consumption is equivalent to changing the price and will work against the price increase's impact. A rebate that works, instead, like a negative fixed charge will increase a household's income without changing the price signal that the household faces each time it turns on the tap. Since demand is a function of income, as well as prices, a rebate that significantly increased household income might erase a small portion of the conservation achieved with a price increase, but this is unlikely to be a significant factor for households in industrialized countries, where annual water bills comprise a tiny fraction of household income.

## 5. Monitoring and Enforcement

[34] In some cases, the monitoring and enforcement costs of market-based approaches to environmental policy can exceed those of CAC policies; how the two classes of policy instrument compare on this dimension depends on many factors [Keohane and Olmstead, 2007]. But in the particular case of metered municipal water consumption, we would expect the costs of monitoring and enforcing compliance with price increases to compare favorably to those for rationing and technology standards.

[35] The difficulty in monitoring and enforcing rationing and technology standards is one reason outdoor watering restrictions are common; outdoor uses are visible, and it is relatively easy to cruise residential streets searching for violators. Even so, as we point out in section 3.2.4, compliance with outdoor water rationing policies may be low. Monitoring and enforcement challenges may also explain noncompliance with indoor water conservation technology standards. Where low-flow fixtures are encouraged or required, they are often replaced with their higher-flow alternatives if consumers are dissatisfied with performance. One analysis suggests that 6% of low-flow showerheads in a Pacific Gas and Electric replacement program were either removed or not used, that showerheads advertised on the

Internet in 2005 include systems supplying up to 10 gallons per minute (gpm), when the Federal standard has been 2.5 gpm since 1992, and that so-called "cascading" showerhead systems had a market share of 15% in 2004 [Biermayer, 2005]. Consumers were dissatisfied with early models of low-flow toilets, and a black market arose in the older models. In September 2008, a search on eBay turns up dozens of 3.5-gallon toilets, technically illegal to install in new U.S. construction since 1992 (see [www.ebay.com](http://www.ebay.com) and search "3.5 toilet"). Achieving full compliance with regulations that restrict consumers' in-home behavior (and in some of their most private activities) is a significant challenge.

[36] In contrast, noncompliance in the case of pricing requires that households consume water "off meter," since water consumption is metered and billed volumetrically in most U.S. cities. Of course, higher prices generate incentives for avoidance as well as conservation. However, at prevailing prices the monitoring and enforcement costs of price changes are likely to compare favorably to the current CAC approach.

## 6. Political Considerations

[37] Water demand management through nonprice techniques is the overwhelmingly dominant paradigm in cities around the world. Raising prices can be politically difficult. After a 2-year drought in the late 1970s, the city of Tucson, Arizona was the first U.S. city to adopt marginal cost water prices, which involved a substantial increase. One year later, the entire Tucson city council was voted out of office because of the water rate increase [Hall, 2000]. Just as few elected officials relish the prospect of raising taxes, few want to increase water rates.

[38] Ironically, nonprice programs are more expensive to society than water price increases, once the real costs of policies and associated economic losses are considered. A parallel can be drawn in this case to market-based approaches to environmental pollution control. Cost effectiveness has only recently been accepted as an important criterion for the selection of policies to control pollution. Given the empirical evidence regarding their higher costs, how can we explain the persistence of CAC approaches? Some resistance to using prices may be due to misinformation, since most policymakers and water customers are not aware of the cost-effectiveness advantage of the price-based approach. For example, a common misconception in this regard is that price elasticity is "too low to make a difference." In this case, economists might make a better effort to communicate the results of demand studies, as we attempt to do here.

[39] The prevalence of subsidized water prices in the short and the long run may also be an example of the common phenomenon of "fiscal illusion." Households may object more strongly to water price increases than to increases in less visible sources of revenue (e.g., local tax bills) that municipalities may use to finance a subsidy. Timmins [2002] demonstrates that the more skewed the income distribution among consumers, the heavier the observed discount in water prices, suggesting that those who set water prices may use the process to achieve distributional goals at the cost of efficiency. The prevalence of CAC water conservation policies may be a result of

traditional interest group politics, in which political constituencies that prefer CAC approaches succeed in preventing the introduction of market-based approaches [Rausser, 2000; Hall, 2000]. Hewitt [2000] provides empirical evidence that a utility's propensity to adopt "market-mimicking" water prices may have to do with administrative sophistication, system ownership (public or private), and financial health.

[40] The literature contains few theoretical discussions of this issue, and even fewer empirical studies. Similar questions have been debated over the dominance of costly CAC policies for pollution control. Economists have modeled the eventual introduction of market approaches as a result of demand by regulated firms, consumers, labor and environmental groups, supply by legislators and other decision makers, or some combination of these forces [Keohane *et al.*, 1998]. There may be a clear parallel with CAC versus market-based approaches to water conservation. But does the model need to change in order to accommodate the fact that such policies are usually set locally and regionally, while pollution control policies tend to be national in scope? The relative incentives of the regulated community (primarily consumers in this case, rather than firms, as in the pollution control case) are also likely quite different. The political economy of water conservation policy instrument choice is an important area for further research.

[41] In pollution control, the adoption of market-based approaches has been supported by some environmental advocacy groups, who realized that greater pollution reductions might be achieved for the same cost if governments switched from CAC to market approaches [Keohane *et al.*, 1998]. Perhaps a similar shift is possible in water conservation policy. There is another aspect of the water conservation context which suggests that consumers, themselves, may be convinced of the benefits of market approaches. Nonprice demand management techniques can create political liabilities in the form of water utility budget deficits, because these policies require expenditures, and if they succeed in reducing demand, they reduce revenues. During prolonged droughts, these combined effects can result in the necessity for price increases following "successful" non-price conservation programs, to protect utilities from unsustainable financial losses. During a prolonged drought, Los Angeles water consumers responded to their utility's request for voluntary water use reductions. Total use and total revenues fell by more than 20 percent. The utility then requested a rate increase to cover its growing losses [Hall, 2000]. In contrast, given common U.S. urban price elasticities, price increases will increase water suppliers' total revenues. The extra per-unit revenues from a price increase outweigh lost revenue from falling demand. It may be advantageous for water managers to explain this carefully to consumers: you can face an increased price now, and choose how you will reduce consumption; or you can comply with our choices for reducing your consumption now, and pay increased prices later.

[42] The relative advantages of price over nonprice water demand management policies are clear. But like other subsidies, low water prices (on a day-to-day basis, as well as during periods of drought) are popular and politically difficult to change. Some communities may be willing to continue to bear excessive costs from inefficient water

pricing, in exchange for the political popularity of low prices. Continuing to quantify and communicate the costs of these tradeoffs is an important priority for future research.

## 7. Concurrent Use of Market-Based and CAC Approaches

[43] Thus far, we have compared and contrasted CAC approaches with market-based policies, yet in many cases, solutions to environmental problems in the real world may include combinations of these policies. *Bennear and Stavins* [2007] identify two common contexts in which the concurrent use of CAC and market-based approaches may be economically justified: where multiple market failures exist, only some of which can be corrected; and where exogenous political or legal constraints cannot be removed.

[44] Water conservation policy offers a clear case of the second circumstance in some municipalities. Raising water prices may be efficient but politically unacceptable to particular constituencies. In other cases, rate-setting officials may be constrained by law, unable to increase water prices by a percentage that exceeds some statutory maximum, or in a time frame that makes prices viable short-run policy levers during a drought. Price setting is a political process for most water supply institutions, not one they can control easily. This may be exacerbated by long billing periods. If a reduction in water consumption is required in the very short run, for example, in the middle of a dry July, but many households and businesses will not be billed until September, consumers' awareness of the price increase may come too late to have the desired short-run impact. (While such a short-run effect is certainly possible, research suggests that price elasticity is insensitive to billing frequency in the long run [Gaudin, 2006; Kulshreshtha, 1996].) This problem might be alleviated by providing consumers with clear information about price changes immediately (e.g., through public service announcements), or by more frequent billing. The implications of political and legal constraints for the relative efficiency of market-based and CAC approaches is an important topic for future research in the economics of water conservation.

[45] Some aspects of the current CAC approaches may also be retained when market approaches are introduced in an effort to make municipal water supply and conservation more equitable. This is typical of many environmental policy situations in which market approaches have been applied [Bennear and Stavins, 2007]. In the case of water pricing, one such effort is the use of increasing-block tariffs (IBTs), in which a low marginal price is charged for water consumption up to some threshold, and consumption above the threshold is priced at a much higher volumetric rate, in some cases even approaching the LRMC of water supply [Olmstead *et al.*, 2007]. The equity aspects of IBT structures have many dimensions; the first "block" quantity of water is made available to all households at the same low price and can be assumed to cover, at a minimum, basic needs like drinking and bathing; those paying the higher-tier price on the margin may be higher-income consumers, primarily households using water outdoors; and the two- (or more) tier price system allows utilities to meet rate-of-return constraints without a rebate system, which might require means testing to achieve any distributional goal.

[46] There are two things to note about IBTs and other combinations of CAC and market-based approaches to water conservation. First, some of the efficiency gains of the market-based approach are lost when these kinds of constraints are imposed. In the case of IBTs, consumers in different blocks face different marginal prices when they choose to turn on the tap or the sprinkler system. The economic losses from this may be quantified (though they have not, to our knowledge, an interesting area for further research). So any distributional advantage is purchased when pairing CAC and market approaches; it does not come for free. This may be fine; efficiency is one of many important goals in setting water prices and conservation policy, and some tradeoffs are inevitable.

[47] But this brings us to our second point about retaining some costly prescriptive policies in order to make market approaches more equitable; it is, at least in theory, unnecessary. Take the case of IBTs. An efficient pricing regime would simply charge the LRMC of supply for all units of water purchased by all consumers, and rebate any excess utility revenues to consumers. Such a system is described in detail by *Boland and Whittington* [2000]. A similar application different from IBTs, moving from water rationing to drought pricing, is described by *Mansur and Olmstead* [2007]. Given the potentially large economic costs of maintaining CAC water conservation policies, even partially, and the desirability of equitable allocation mechanisms for water, the design of market-based water conservation approaches that are explicitly (and not just potentially) progressive is a critical area for future research.

## 8. Conclusions

[48] Using prices to manage water demand is more cost effective than implementing nonprice conservation programs. The gains from using prices as an incentive for conservation come from allowing households to respond to increased water prices in the manner of their choice, rather than installing a mandated technology or reducing specified uses. The theoretical basis for this point is very strong and was established in the economics of pollution control many decades ago. A handful of papers have now established the parallel theory for water conservation, and statistical studies have generated empirical estimates of the potential economic gains from a shift from technology standards and rationing to market-based approaches. While we anticipate that the results of this type of research will continue to raise new questions, the emerging evidence suggests that cities would do well to switch from CAC to price-based water conservation, in terms of cost effectiveness.

[49] Price-based approaches to water conservation also compare favorably to CAC regulations in terms of monitoring and enforcement. In terms of predictability, neither policy instrument has an inherent advantage over the other. Likewise, neither policy instrument has a natural advantage in terms of equity. Under price-based approaches, low-income households are likely to contribute a greater share of a city's aggregate water consumption reduction than they do under certain types of nonprice demand management policies. But progressive price-based approaches to water demand management can be developed by returning some utility profits due to higher prices in the form of consumer rebates. Such rebates will not significantly dampen the

effects of price increases on water demand, as long as rebates are not tied to current water consumption.

[50] Raising water prices (like the elimination of any subsidy) is politically difficult, but there may be political capital to be earned by elected officials who can demonstrate the cost-effectiveness advantages of the price-based approach, the potential to achieve greater gains in water conservation for the same cost as CAC approaches, or the ability of price-based approaches to avoid the "reduce now, pay later, anyway" problem of CAC approaches. At a minimum, communities choosing politically popular low water prices over cost effectiveness should understand this tradeoff. Where water rate setting officials are constrained by law from raising water prices, a discussion of the real costs of these constraints would be useful.

[51] In comparing price and nonprice approaches to urban water conservation, we have highlighted some important areas for future research in the economics of water conservation. These include: empirical estimation of industrial demand elasticities and industrial responses to nonprice policies (since the focus of the literature has primarily been on residential consumption); quantification by economists of the economic losses from technology standards, rationing, and other CAC approaches in specific cases, and effective communication of such results to the broader water resource management community; theoretical and empirical investigation of the implications of political and legal constraints on pricing for the relative efficiency of market-based and CAC approaches; the design of market-based water conservation approaches that are explicitly (and not just potentially) progressive; and modeling the political economy of water conservation policy instrument choice.

[52] We are reminded of the debate, beginning in the late 1980s, over market-based approaches to pollution control. While some opponents of environmental taxes and tradable permit systems still resist these approaches, policymakers have succeeded in implementing them in many cases, achieving impressive pollution reductions at great cost savings over more prescriptive approaches. A similar shift in the area of water conservation, where the principles are essentially the same, is long overdue.

[53] **Acknowledgments.** The authors are grateful for financial support from the Pioneer Institute for Public Policy Research and for the comments of three anonymous referees.

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S. M. Olmstead, Yale School of Forestry and Environmental Studies, 195 Prospect Street, New Haven, CT 06511, USA. (sheila.olmstead@yale.edu)

R. N. Stavins, Harvard Kennedy School, Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138, USA. (robert\_stavins@harvard.edu)

# Ordinance 13-Tucson

## An Ordinance Amending Chapter 5 of Title 6 Regarding Irrigation Service

WHEREAS, the state legislature has granted general welfare power to the City Council, independent, apart from, and in addition to, its specific grants of legislative authority, which enables the City Council to pass ordinances as are necessary and proper to provide for the safety, promote the prosperity, improve the peace and good order, comfort, and convenience of the City and its inhabitants, and for the protection of property in the City; and

WHEREAS, one of the ways the City Council has exercised its legislative authority is through the creation of a secondary water system providing for the irrigation and secondary water needs of the residents of Syracuse; and

WHEREAS, the primary supplier of water to the City secondary water system is Weber & Davis Counties Canal Company (WDCCC); and

WHEREAS, WDCCC issued a notice on May 1, 2013 that water shortages are inevitable due to low snow pack in the high mountain elevations during the 2013 winter, the drought of 2012, the Echo Reservoir Safety of Dams construction, and low reservoir storage carryovers; and

WHEREAS, in that May 1 notice WDCCC estimated water shortages could be as much as 40% less water than last year for the 180 day outdoor irrigation water season; and

WHEREAS, as the operator of the secondary water system for Syracuse, it behooves the City Council to implement regulations to address the inevitable water shortages;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF SYRACUSE, UTAH, Sections 4-05-200 through 4-05-290 of the Syracuse Municipal Code are hereby enacted as follows:

### SECTION 1:

**4-05-200 Purpose.** This part establishes a city emergency water conservation response plan.

**4-05-210 Declaration of policy.** It is hereby declared that, because of varying conditions related to water supply and distribution system capabilities, it is necessary to establish and to enforce methods and procedures to ensure that, in time of emergency shortage of the local water supply, the water resources available to

32 the city are put to the maximum beneficial use, that the unreasonable use, or  
33 unreasonable method of use is prevented, and that conservation of water is  
34 accomplished in the interests of the customers of the city and for the public  
35 health, safety, and welfare.

36 **4-05-220 Definitions.** For the purposes of this part:

37 “*Economic hardship*” means a threat to an individual's or business' primary source  
38 of income.

39 “*Notification to public*” means notification through local media, including  
40 interviews and issuance of news releases.

41 “*Outdoor watering day*” means a specific day, as described in a specific outdoor  
42 watering plan, during which irrigation with sprinkler systems or otherwise may  
43 take place.

44 **4-05-230 Application.**

45 (1) This part applies to all departments of the city, and to all city water  
46 customers who own, occupy, or control secondary water use on any  
47 premises.

48  
49 (2) No person shall make, cause, use, or permit the use of secondary water  
50 received from the city for residential, commercial, industrial,  
51 governmental or any other purpose in any manner contrary to any  
52 provision in this article.

53  
54 (3) Mandatory emergency conservation measures shall be implemented  
55 based upon the declaration of an emergency pursuant to section 4-05-  
56 230.

57 **4-05-240 Declaration of water emergency authorized.** The mayor and council or, in  
58 the absence of a quorum, the mayor or the mayor's designee, upon the  
59 recommendation of the Public Works Director is hereby authorized to declare a  
60 water emergency and to implement mandatory conservation measures as set  
61 forth in this part.

62 **4-05-250 Implementation, termination.**

63 (1) The Public Works Director shall develop guidelines which set forth general  
64 criteria to assist the mayor and council, or in the absence of a quorum, the

65 mayor or the mayor's designee in determining when to declare a water  
66 emergency. Upon declaration of a water emergency, the city manager shall  
67 report in writing to the mayor and council providing the reasons for and  
68 expected duration of such emergency and describing implementation of  
69 emergency water conservation measures.

70 (2) Upon the cessation of the condition or conditions giving rise to the water  
71 emergency, or upon majority vote of the mayor and council, or in the  
72 absence of a quorum, the mayor or the mayor's designee shall declare the  
73 water emergency terminated. Upon such termination, the mandatory  
74 conservation measures shall no longer be in effect.

75 **4-05-260 Mandatory emergency water conservation measures.** Upon declaration of a  
76 water emergency and notification to the public, the following mandatory  
77 restrictions upon nonessential uses shall be enforced:

78 (1) All outdoor irrigation, except for those areas irrigated with reclaimed water,  
79 is prohibited. If the city manager deems it appropriate, a schedule  
80 designating certain outdoor watering days may be implemented in place of  
81 the irrigation ban.

82 (2) Washing of sidewalks, driveways, parking areas, tennis courts, patios or  
83 other paved areas with water from any pressurized source, including garden  
84 hoses, except to alleviate immediate health or safety hazards, is prohibited.

85 (3) The outdoor use of any water-based play apparatus connected to a  
86 pressurized source is prohibited.

87 (4) Operation of water cooled space and equipment cooling systems below an  
88 operating efficiency level of two cycles of concentration is prohibited.

89 (5) Restaurants and other food service establishments are prohibited from  
90 serving water to their customers, unless water is specifically requested by the  
91 customer.

92 (6) Operation of outdoor misting systems used to cool public areas is  
93 prohibited.

94 (7) The filling of swimming pools, fountains, spas or other exterior water  
95 features is prohibited.

96 (8) The washing of automobiles, trucks, trailers and other types of mobile  
97 equipment is prohibited, except at facilities equipped with wash water  
98 recirculation systems, and for vehicles requiring frequent washing to protect  
99 public health, safety and welfare.

100 **4-05-270** **Variations.** The city manager, or the city manager's designate, is authorized to  
101 review hardship cases and special cases within which strict application of this  
102 chapter would result in serious hardship to a customer. A variance may be  
103 granted only for reasons involving health, safety or economic hardship.  
104 Application for variance from requirements of this chapter must be made on a  
105 form provided by the Public Works Director.

106 **4-05-280** **Violation.**

107 (1) In the event of any violation of this part, a written notice shall be placed on  
108 the property where the violation occurred and a duplicate mailed to the  
109 person who is regularly billed for the service where the violation occurs and  
110 to any person known to the City who is responsible for the violation or it's  
111 correction. Such notice shall describe the violation and order that it be  
112 corrected, ceased or abated immediately or within such specified time as the  
113 City determines is reasonable under the circumstances and shall contain a  
114 description of the fees and penalties associated with such violation. If such  
115 order is not complied with, the City may forthwith disconnect the  
116 secondary water service where the violation occurs. A two hundred fifty  
117 dollar (\$250.00) fee shall be imposed for the reconnection of any service  
118 disconnected pursuant to noncompliance, which shall be in addition to  
119 other fees or charges imposed by this chapter for disconnection of service.

120 (2) In addition to being grounds for discontinuation of service, violation of any  
121 provision of this article shall be an infraction. An individual or corporation  
122 convicted of violating provisions of this section shall be assessed a penalty  
123 of not less than two hundred fifty dollars (\$250.00).

124 **4-05-290** **Enforcement.** The city manager is authorized to designate city employees to  
125 enforce the provisions of this part.

126 SECTION 2. Effective Date. This ordinance shall become effective upon publication.

127 PASSED BY THE SYRACUSE CITY COUNCIL, STATE OF UTAH, THIS \_\_\_\_\_  
128 DAY OF \_\_\_\_\_, 2013.

129

130

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131 Jamie Nagle, Mayor

132

133

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134

135 ATTEST:

SEAL

136 Cassie Brown, City Recorder

# Ordinance 13-St. Johns River

## An Ordinance Amending Chapter 5 of Title 6 Regarding Irrigation Service

WHEREAS, the state legislature has granted general welfare power to the City Council, independent, apart from, and in addition to, its specific grants of legislative authority, which enables the City Council to pass ordinances as are necessary and proper to provide for the safety, promote the prosperity, improve the peace and good order, comfort, and convenience of the City and its inhabitants, and for the protection of property in the City; and

WHEREAS, one of the ways the City Council has exercised its legislative authority is through the creation of a secondary water system providing for the irrigation and secondary water needs of the residents of Syracuse; and

WHEREAS, the primary supplier of water to the City secondary water system is Weber & Davis Counties Canal Company (WDCCC); and

WHEREAS, WDCCC issued a notice on May 1, 2013 that water shortages are inevitable due to low snow pack in the high mountain elevations during the 2013 winter, the drought of 2012, the Echo Reservoir Safety of Dams construction, and low reservoir storage carryovers; and

WHEREAS, in that May 1 notice WDCCC estimated water shortages could be as much as 40% less water than last year for the 180 day outdoor irrigation water season; and

WHEREAS, as the operator of the secondary water system for Syracuse, it behooves the City Council to implement regulations to address the inevitable water shortages;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF SYRACUSE, UTAH, Sections 4-05-200 through 4-05-280 of the Syracuse Municipal Code are hereby enacted as follows:

### SECTION 1:

**4-05-200 Intent and Purpose.** It is the intent and purpose of this Part to implement procedures that promote water conservation through more efficient landscape irrigation.

**4-05-210 Definitions.** For the purposes of this part:

30 “*Landscape irrigation*” means the outside watering of plants in a landscape such as  
31 shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens and other  
32 such flora that are situated in such diverse locations as residential areas, public,  
33 commercial, and industrial establishments, and public medians and rights-of-  
34 way. “Landscape irrigation” does not include agricultural crops, nursery plants,  
35 cemeteries, golf course greens, tees, fairways, primary roughs, and vegetation  
36 associated with recreational areas such as playgrounds, football, baseball and  
37 soccer fields.

38 “*Non-residential landscape irrigation*” means the irrigation of landscape not included  
39 within the definition of “residential landscape irrigation,” such as that  
40 associated with public, commercial and industrial property, and public medians  
41 and rights-of-way.

42 “*Residential landscape irrigation*” means the irrigation of landscape associated with  
43 any housing unit having sanitary and kitchen facilities designed to accommodate  
44 one or more residents, including multiple housing units and mobile homes.

45 **4-05-230 Landscape Irrigation Schedules**

46 (1) When Daylight Savings Time is in effect, landscape irrigation shall occur only  
47 in accordance with the following irrigation schedule:

48 (a) Residential landscape irrigation at odd numbered addresses or no address  
49 may occur only on Wednesday and Saturday and shall not occur between  
50 10:00 a.m. and 6:00 p.m.; and

51 (b) Residential landscape irrigation at even numbered addresses may occur  
52 only on Thursday and Sunday and shall not occur between 10:00 a.m. and  
53 6:00 p.m.; and

54 (c) Non-residential landscape irrigation may occur only on Tuesday and  
55 Friday and shall not occur between 10:00 a.m. and 6:00 p.m.; and

56 (d) In no event shall irrigation occur for more than 30 minutes per irrigation  
57 zone on each day that irrigation occurs.

58 (2) All landscape irrigation shall be limited in amount to only that necessary to  
59 meet landscape needs.

60 **4-05-240 Exceptions to the Landscape Irrigation Schedule.** Landscape irrigation  
61 shall be subject to the following irrigation schedule exceptions:

- 62 (1) Irrigation using a micro-spray, micro-jet, drip or bubbler irrigation system is  
63 allowed anytime.
- 64 (2) Irrigation of new landscape is allowed at any time of day on any day for the  
65 initial 30 days and every other day for the next 30 days for a total of one 60-  
66 day period, provided that the irrigation is limited to the minimum amount  
67 necessary for such landscape establishment.
- 68 (3) Watering in of chemicals, including insecticides, pesticides, fertilizers,  
69 fungicides, and herbicides, when required by law, the manufacturer, or best  
70 management practices, is allowed at any time of day on any day within 24  
71 hours of application. Watering in of chemicals shall be limited to the amount  
72 required by law, the manufacturer, or best management practices.
- 73 (4) Irrigation systems may be operated at any time of day on any day for  
74 maintenance and repair purposes not to exceed 20 minutes per hour per  
75 zone.
- 76 (5) Irrigation using a hand-held hose equipped with an automatic shut-off  
77 nozzle is allowed at any time of day on any day.
- 78 (6) Discharge of water from a water-to-air air-conditioning unit or other water-  
79 dependent cooling system is not limited.
- 80 (7) The use of water from a reclaimed water system is allowed anytime. For the  
81 purpose of this paragraph, a reclaimed water system includes systems in  
82 which the primary source is reclaimed water, which may or may not be  
83 supplemented from another source during peak demand periods.

84 **4-05-250 Additional Requirements.** Any person who purchases and installs an  
85 automatic landscape irrigation system must properly install, maintain, and  
86 operate technology that inhibits or interrupts operation of the system during  
87 periods of sufficient moisture.

88 **4-05-260 Variance From Specific Day of the Week Limitations.** A variance from the  
89 specific landscape irrigation days or day set forth in Section 4-05-230 may be  
90 granted by the City Manager if strict application of the scheduled days or day  
91 would lead to unreasonable or unfair results in particular instances, provided  
92 that the applicant demonstrates with particularity that compliance with the  
93 scheduled days or day will result in a substantial economic, health or other  
94 hardship on the applicant requesting the variance or those served by the

95 applicant. Where a contiguous property is larger than one acre, a variance may  
96 be granted hereunder so that each acre may be irrigated on different days or day  
97 than other acres of the property. However, in no event shall a variance allow a  
98 single acre to be irrigated more than two days per week during Daylight Savings  
99 Time.

100 **4-05-270 Enforcement Officials.** Law enforcement officials having jurisdiction in the  
101 area governed by this Ordinance are hereby authorized to enforce the  
102 provisions of this Ordinance. In addition, the City Manager may also delegate  
103 enforcement responsibility for this ordinance to other City employees.

104 **4-05-280 Penalties.** Violation of any provision of this Ordinance shall be subject to the  
105 following penalties:

- 106 (1) First violation per calendar year: Written Warning
- 107 (2) Second violation per calendar year: Infraction with a fine of \$50.00
- 108 (3) Subsequent violation per calendar year: Infraction with a fine of \$500.00

109 A separate offense shall be deemed committed upon each day during or on  
110 which a violation occurs or continues.

111 SECTION 2. Effective Date. This ordinance shall become effective upon publication.

112 PASSED BY THE SYRACUSE CITY COUNCIL, STATE OF UTAH, THIS \_\_\_\_\_  
113 DAY OF \_\_\_\_\_, 2013.

114  
115 \_\_\_\_\_

116 Jamie Nagle, Mayor

117  
118 \_\_\_\_\_

119

120 ATTEST:

SEAL

121 Cassie Brown, City Recorder

# Ordinance 13-Ivory Tower

## An Ordinance Amending Chapter 5 of Title 6 Regarding Irrigation Service

WHEREAS, the state legislature has granted general welfare power to the City Council, independent, apart from, and in addition to, its specific grants of legislative authority, which enables the City Council to pass ordinances as are necessary and proper to provide for the safety, promote the prosperity, improve the peace and good order, comfort, and convenience of the City and its inhabitants, and for the protection of property in the City; and

WHEREAS, one of the ways the City Council has exercised its legislative authority is through the creation of a secondary water system providing for the irrigation and secondary water needs of the residents of Syracuse; and

WHEREAS, the primary supplier of water to the City secondary water system is Weber & Davis Counties Canal Company (WDCCC); and

WHEREAS, WDCCC issued a notice on May 1, 2013 that water shortages are inevitable due to low snow pack in the high mountain elevations during the 2013 winter, the drought of 2012, the Echo Reservoir Safety of Dams construction, and low reservoir storage carryovers; and

WHEREAS, in that May 1 notice WDCCC estimated water shortages could be as much as 40% less water than last year for the 180 day outdoor irrigation water season; and

WHEREAS, as the operator of the secondary water system for Syracuse, it behooves the City Council to implement regulations to address the inevitable water shortages;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF SYRACUSE, UTAH, Sections 4-05-200 through 4-05-280 of the Syracuse Municipal Code are hereby enacted as follows:

### SECTION 1:

**4-05-200 Water conservation compliance.** No person who uses water from the city pressure irrigation water system shall make, cause, use or permit the use of water for residential, commercial, industrial, agricultural, governmental or any other purposes in a manner contrary to any provisions of this Title. Provided further, that no person shall make, cause, use or permit the use of water in a manner contrary to this part, regardless of whether that water is received from

32 the City. When used in this chapter, the term “residential” shall refer to  
33 properties zoned as R-1, R2, R-3, PRD, or Cluster under Title Ten of the  
34 Syracuse Municipal Code.

35 **4-05-210 Mandatory compliance—Lawn and landscape watering.** The following  
36 mandatory restrictions shall apply to all customers of, or persons who use or  
37 receive water from the City pressure irrigation water service:

- 38 (1) All outdoor irrigation of grass, trees, plants or other vegetation on  
39 residential properties on the side of the street on which building  
40 addresses are even numbered, may be done only Mondays and  
41 Thursdays; and on the side of the street on which buildings are odd  
42 numbered, such vegetation may be irrigated only on Wednesdays and  
43 Saturdays. In case of corner buildings having both odd and even  
44 numbers, the number carried on the books of the City shall control.  
45
- 46 (2) All outdoor irrigation of grass, trees, plants or other vegetation on  
47 nonresidential properties, including public property, may be permitted  
48 only on Tuesdays and Fridays. All properties not falling within the  
49 residential classifications identified in section 4-05-200 shall be  
50 considered nonresidential and shall be watered in accordance with the  
51 requirements of this subsection.  
52
- 53 (3) From April 1st to September 30th, all outdoor irrigation of vegetation is  
54 prohibited between the hours of ten a.m. and six p.m.  
55
- 56 (4) The Public Works Director or his designee shall have the authority to  
57 review special situations and hardship cases upon application of any  
58 person in accordance with the procedures set forth in Section 4-05-240  
59 of this chapter.

60 **4-05-220 Nonessential water use restrictions.** The following restrictions shall apply to  
61 all customers of or persons who use or receive water from the City pressure  
62 irrigation water service:

- 63 (1) Washing Vehicles.  
64 (a) The washing of vehicles shall be done only with a hand-held bucket  
65 or a hand-held hose equipped with a shut-off nozzle that completely  
66 shuts off the flow of water, even if left unattended. This restriction  
67 does not apply to the washing of vehicles when conducted on the

68 premises of a commercial car wash or a commercial service station.

69  
70 (b) The washing of vehicles for fund-raising purposes must be conducted  
71 at a commercial car wash.

72  
73 (c) Prior to connection of water service to any commercial car wash  
74 issued building permits for construction after June 1, 2013, a  
75 certification shall be provided to the City that the car wash uses no  
76 more than fifty gallons of water per vehicle washed. Absent such  
77 certification, no water service will be provided.

78  
79 (2) The following uses of water are defined as “wasting water” and are  
80 absolutely prohibited:

81  
82 (a) Irrigating any turf grass, tree, plant, or other vegetation, or otherwise  
83 utilizing the city pressurized irrigation water service to permit or cause  
84 water to pond, or to flow, spray or otherwise move or be discharged  
85 from the premises of any person responsible for any property within  
86 the corporate limits of the city, or which receives water from the city  
87 to or upon any street, alley, gutter or ditch, or other public right-of-  
88 way, or into a storm water drainage system;

89  
90 (b) Failing to repair a leak within five working days of the discovery of  
91 same;

92  
93 (c) Washing sidewalks, driveways, parking areas, tennis courts, patios or  
94 other impervious surface areas with a hose, except in emergencies to  
95 remove spills of hazardous materials or to eliminate dangerous  
96 conditions which threaten the public health, safety, or welfare.  
97 “Impervious surface area” means any structure, street, driveway,  
98 sidewalk, patio or other surface area covered with brick, paving, tile  
99 or other impervious or nonporous material.

100  
101 (3) When referred to in this subsection, “swimming pool” shall mean any  
102 portable or permanent structure containing a body of water twenty-four  
103 inches or more in depth and containing one thousand one hundred  
104 twenty two gallons or more of water and intended for recreational  
105 purposes, including a wading pool. All swimming pools, which are

constructed after the effective date of this ordinance must be equipped with filtration, pumping and recirculation systems. All existing swimming pools not equipped with such shall, within five years of January 1, 2014, be converted to filtration, pumping and recirculation systems, unless the review board, upon application of the pool owner or operator for a variance under Section 4-05-240 of this chapter, grants such a variance or extension of time. It is unlawful to drain swimming pools into the street, alley, gutter or other public right-of-way, ditch, or storm water drainage system. Swimming pools may be drained into the sanitary sewer system only in coordination with Syracuse Public Works Director or the Director's designee.

- (4) New or replacement bleeder lines from evaporative coolers shall not be larger than one eighth-inch inside diameter. Bleeder lines shall be conducted outside and discharged so that the effluent can be used for water landscaping and other outdoor vegetation, except where this would be impractical or unfeasible.
- (5) No person shall use water for non-residential single pass cooling or heating purposes unless the water is reused for other purposes. "Single pass cooling or heating" means the use of water without recirculation to increase or decrease the temperature of equipment, a stored liquid or a confined airspace.

**4-05-230 Declaring of nuisance.** The flow of secondary water from property into streets, alleys, gutters, and other public rights-of-way, ditches, or into a storm water drainage system is contrary to the public health, safety and welfare of the citizens of Syracuse and is therefore declared to be a nuisance. The City may take legal action to abate such a nuisance, including but not limited to seeking injunctive relief. This authorization to seek injunctive relief, or other legal action to abate such a nuisance shall not preclude prosecution for a violation of this chapter.

**4-05-240 Variances and permits.**

- (1) Owners of newly seeded or sodded turf grass and landscaping and new residential and nonresidential developments may receive a landscape watering permit upon application and approval by the Public Works Director allowing for daily watering of the same until the turf grass and landscaping are established, which shall not exceed thirty days.

143 (2) The Public Works Director, Community and Economic Development  
144 Director, and City Manager, or their respective designees, shall be  
145 immediately established as a review board to review hardship and special  
146 cases which cannot fully comply with the provisions of this chapter after  
147 receipt of an application for a variance or permit.  
148

149 The review board will review hardship or special cases to determine whether  
150 a particular case warrants a variance or permit. The review board shall  
151 consider the facts of each case separately and decide whether to grant a  
152 variance or permit within 10 working days of the receipt of a properly  
153 completed “Application for Variance/Permit” form which shall be  
154 developed by the Public Works Director. A variance shall be granted only for  
155 reasons of economic hardship, medical hardship, or if there is a legitimate  
156 public health or safety concern that will be promoted or fulfilled as a result of  
157 granting the permit or variance.  
158

159 An “economic hardship” means a threat to an individual's or business'  
160 primary source of income, and where not granting the variance would result  
161 in material structural damage to the person's property.  
162

163 A “medical hardship” means a situation where it is determined that a  
164 person's ill health or medical condition requires a dependency upon others to  
165 water or irrigate.  
166

167 Under no circumstances shall inconvenience or the potential for damages of  
168 landscaping be considered an economic hardship or significant damage to  
169 property which justifies a variance. The review board shall authorize only the  
170 implementation of equitable water use restrictions which further the intent of  
171 the City Council’s water conservation ordinance. Any special water use  
172 restrictions authorized by the review board in each hardship or special case  
173 shall be set forth on the face of the variance or the permit.  
174

175 A fee of twenty-five dollars shall be assessed per application to defray  
176 administrative costs. The fee may be waived upon the execution of an  
177 affidavit stating that applicant for the variance is unable to pay the fee and  
178 such affidavit shall be sworn before a notary public. Final determination of an  
179 applicant's inability to pay shall be made by the review board.

- 180 (3) A variance or permit issued under this section expires under its own terms and  
181 conditions, but in no event shall a variance or permit be issued for a period of  
182 more than five years from the date of issuance. Any person issued a variance or  
183 permit must fully comply with all the provisions of this chapter as an express  
184 condition of that person's variance or permit.  
185
- 186 (4) Any person who is issued a variance or permit and uses water supplied or  
187 delivered by the City shall provide proof of such variance or permit upon  
188 demand by any person authorized to enforce this chapter. Upon conviction of  
189 violating any provision of this chapter, the review board may revoke or suspend  
190 any permit or variance previously granted. Provided, however, the review board  
191 shall notify the permittee of the proposed revocation five working days before  
192 taking such action, and if within that time the permittee requests a hearing in  
193 writing, the permittee shall be given an opportunity to be heard by the review  
194 board prior to taking such action.  
195
- 196 (5) No prosecution for a violation of any provision of this chapter may be  
197 suspended for the sole purpose of allowing a person to obtain a variance or  
198 permit.

199 **4-05-250 Appeal to City Council.** Any person who applies for a permit or variance  
200 under Section 4-05-240 and is denied such permit or variance by the review  
201 board, or whose permit or variance is revoked or suspended by the review  
202 board, may appeal the decision of the review board by filing an intention to  
203 appeal in writing with the City Recorder within five working days of the review  
204 board's decision. If a proper appeal is timely filed, the City Council will hear the  
205 appeal within thirty days of the time the appeal is filed with the City Recorder.  
206 The City Council may take any action it deems necessary with regard to the  
207 appeal including denying same, granting same, or granting the requested permit  
208 or variance with conditions. The decision of the City Council shall be final and  
209 binding.

210 **4-05-260 Penalty.** Any person who violates any of the provisions of this chapter shall be  
211 deemed guilty of a class B misdemeanor and upon conviction, shall be punished  
212 by a fine not less than \$100.00 dollars and not to exceed \$1,940.00 dollars. The  
213 violation of each provision of this chapter, and each separate violation thereof,  
214 shall be deemed a separate offense and shall be punished accordingly.

215 **4-05-270** **Other enforcement action.** Nothing contained in Section 4-05-260 or any  
216 other provision of this chapter shall prevent the city from seeking compliance  
217 with or enforcement of this chapter, from seeking injunctive relief in a court of  
218 competent jurisdiction, or from utilizing any other civil or equitable remedy to  
219 enforce the provisions of this chapter. The city attorney's office is authorized to  
220 institute injunctive relief or any other civil action deemed necessary to enforce  
221 compliance with the provisions of this chapter.

222 **4-05-280** **Exceptions to enforcement.** The following shall constitute exceptions from  
223 compliance with the provisions of this chapter:

- 224 (1) The water is a result of natural events such as rain or snow;  
225
- 226 (2) The flow is a result of temporary failures or malfunctions of the water  
227 supply system;  
228
- 229 (3) The flow is a result of water used for firefighting purposes including the  
230 inspection and pressure testing of fire hydrants or the use of water for  
231 firefighting training activities;  
232
- 233 (4) The use of water is required for the control of dust or the compaction of  
234 soil as may be required by this code;  
235
- 236 (5) The water is used to wash down areas where flammable or otherwise  
237 hazardous material has been spilled and creates a dangerous condition;  
238
- 239 (6) The water is used to prevent or abate public health, safety or accident  
240 hazards when alternate methods are not available.  
241
- 242 (7) The water is used for routine inspection or maintenance of the water  
243 supply system;  
244
- 245 (8) The water is used to facilitate construction within public right-of-way in  
246 accordance with the requirements of the city and good construction  
247 practices;  
248
- 249 (9) The use of water is permitted under the terms of a variance, permit or  
250 compliance agreement granted by the review board or the City Council;

- 251 (10) The water that is used for street sweeping, sewer maintenance or other  
252 established utility and public works practices;  
253
- 254 (11) Watering contrary to the even/odd watering requirements, under  
255 Sections 4-05-210(1) and (2), and from the time of day watering  
256 requirements under subsection (3), may be permissible for one day only  
257 where application of chemicals requires immediate watering to preserve  
258 an existing lawn. In cases of commercial application, a receipt from a  
259 commercial lawn treatment company indicating the date of treatment,  
260 the address of the property treated, the name and address of the  
261 commercial contractor, and the chemical treatment required shall  
262 constitute evidence that the owner or person responsible for the  
263 property is entitled to this exception. Where treatment with a  
264 noncommercial application of chemicals requires immediate watering to  
265 preserve an existing lawn, the owner or person responsible for the  
266 property must contact the water conservation department prior to the  
267 application of chemicals and provide evidence satisfactory to the water  
268 conservation manager for approval of this exception;  
269
- 270 (12) Outdoor irrigation necessary for the establishment of newly seeded or  
271 sodded turf grass and landscaping in new residential and commercial  
272 developments;  
273
- 274 (13) Plants which cannot be kept alive without daily watering may be  
275 permitted to be watered from a bucket but not from the use of a hose on  
276 the days when watering is prohibited.

277 **4-05-290 Issuance of citations.** The Public Works Director or designee, or any other  
278 personnel authorized to issue class B misdemeanor citations are authorized to  
279 issue citations for violations of this chapter.

280 **4-05-300 Water Emergency.** The Mayor may declare a water emergency in case of a  
281 severe drought, in the event of any condition which interrupts the ability of the  
282 City to supply water, where curtailment of the use of water is necessary due to  
283 war, a natural disaster, to protect the public health, safety or welfare, or to  
284 preserve the water supply. In the event such water emergency is to continue for  
285 more than five days, such measures must be passed by resolution by majority of  
286 City Council in order for the declaration of emergency to continue beyond the  
287 initial five day period.

288 **4-05-310 Water emergency—Restriction of water use.** The City Manager may  
289 implement any one or more of the following restrictions and regulations  
290 curtailing water use upon the declaration of a water emergency:

- 291 (1) Prohibit all restaurants from serving water to their customers except when  
292 specifically requested by the customer;  
293  
294 (2) Prohibit the operation of any ornamental fountain or similar structure;  
295  
296 (3) Suspend the issuance of all variances or permits hereunder;  
297  
298 (4) Prohibit the filling, refilling or adding of water to all swimming pools;  
299  
300 (5) Prohibit the washing of all vehicles and equipment except upon the  
301 premises of a commercial car wash;  
302  
303 (6) Require that the washing of motor vehicles, upon the immediate premises  
304 of a commercial car wash or a commercial service station, shall occur only  
305 between the hours of twelve noon and five p.m.; or  
306  
307 (7) Any additional restriction on the use of water from the city's water supply  
308 system in all or in any part of the city as the City Council may authorize.

309 SECTION 2. Effective Date. This ordinance shall become effective upon publication.

310 PASSED BY THE SYRACUSE CITY COUNCIL, STATE OF UTAH, THIS \_\_\_\_\_  
311 DAY OF \_\_\_\_\_, 2013.

312  
313 \_\_\_\_\_

314 Jamie Nagle, Mayor

315  
316 \_\_\_\_\_

317  
318 ATTEST:

SEAL

319 Cassie Brown, City Recorder