**Evans Water and Sewer Board**
Evans Community Complex
Council Chambers
1100 37th Street, Evans, Colorado

Time and Date: July 16, 2020 @ 3:30 p.m.

## 1. ROLL CALL

Chairman: Jeff Oyler
Vice-Chairman:
Commissioners: Randy Blewer
Zac Matteson
Glenn Snyder
Ex-Officio Members:
Mayor: Brian Rudy
City Manager: Jim Becklenberg

City Staff:
Randy Ready, Public Works Director
Rick Pickard, Senior Civil Engineer
Mark Oberschmidt, City Engineer
Robby Porsch, Wastewater Superintendent
Karen Sabin, Public Works Administrative Support

## 2. APPROVAL OF MINUTES

Approval of minutes from 05.21.2020 regular board meeting

## 3. AGENDA ITEMS

A. Municipal Water Efficiency Plan Approval and Recommendation (Rick Pickard)

## 4. POTABLE, NON-POTABLE, AND STORMWATER UPDATES

a. Review and discussion of the draft water conservation section of the Master Plan. (Rick Pickard)
b. 17th Avenue Waterline (Mark Oberschmidt)
c. Eastside Storm Sewer (Mark Oberschmidt)
d. Tuscany Tract O (Mark Oberschmidt)
e. Willowbrook (Randy Ready)
f. Water distribution staffing (Randy Ready)

## 5. WASTEWATER UPDATES

a. Lagoon Decommissioning (Mark Oberschmidt)
b. Wastewater Treatment Plant capacity review – population and flow (Randy Ready and Robby Porsch)
c. Lagoon Dewatering (Robby Porsch)

Water and Sewer Board packets are prepared several days prior to the meetings. This information is reviewed and studied by the Board, eliminating lengthy discussions to gain basic understanding. Timely action and/or short discussion on agenda items do not reflect lack of thought or analysis. An informational packet is available for public inspection, which is posted on the bulletin board adjacent to the Council Chambers as soon as its available, and which can be accessed Monday through Friday 8:00 a.m. to 5:00 p.m. excluding holidays.

Staff Contact: Randy Ready, Public Works Director & Assistant City Manager
(970) 475-1160 • rready@evanscolorado.gov

**Evans Water and Sewer Board**
Meeting will be held virtually.
See instructions below to attend.

Time and Date: May 21, 2020 @ 3:30 p.m.

**The May 21, 2020, Water & Sewer Board meeting will be held virtually.**
**To attend, please click this link at the time and date of the hearing:**
**https://us02web.zoom.us/j/89893858351**

**To join by phone: Dial (for higher quality, dial a number based on your current location): US: +1 669 900 9128 or +1 253 215 8782 or +1 346 248 7799 or +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799 – Webinar ID: 898 9385 8351**

**International numbers available: https://us02web.zoom.us/u/keBI5X2M0F**

## 1. ROLL CALL – 03:34 pm

| | |
|---|---|
| Chairman: | Jeff Oyler – Present |
| Vice-Chairman: | James Krenzel – Present |
| Commissioners: | Randy Blewer – Present |
| | Zac Matteson – Not Present |
| | Glenn Snyder – Present |

Ex-Officio Members:

| | |
|---|---|
| Mayor: | Brian Rudy – Not Present |
| City Manager: | Jim Becklenberg – Present |

City Staff:
Randy Ready, Public Works Director
Mark Oberschmidt, City Engineer
Rick Pickard, Senior Civil Engineer
Robby Porsch, Wastewater Superintendent
Karen Sabin, Public Works Administrative Support

## 2. APPROVAL OF MINUTES – 03:35 pm

Approval of minutes from 02.20.2020 regular board meeting
****Motion to approve minutes/second. Passes unanimously.**

## 3. PUBLIC COMMENT – 03:40 pm

Doug Mitich: Last couple weeks have been pretty rough in our neighborhood as far as smell coming from the WWTP. Can the City give any information on the status of this problem and a possible solution?

Robby: The system that we demo-ed is currently going through permitting with CDPHE; it's a 90-180 day approval process. As soon as its approved, we can budget for it. Hopefully get it budgeted and



DRAFT

installed next year. One lagoon did get overused this last winter due to weather changes that kept the City from cleaning both ponds out completely. That put one pond at capacity this spring, so it has a thick sludge cap on it that cooks in the sun all day. It can get pretty ripe.

June 8 the contractor will be on site to remove the solids from that pond, which will help the odors. Should be finished with the one pond in 8-14 days.

Question: What pond is it that you will be draining and taking out of service? Robby: Those are the old ponds. They're in a different location. These ponds at the plant will stay in service. The sludge blanket on the west pond is the one that's heavy.

## 4. GENERAL UPDATES

**Potable, Non-potable, and Stormwater Projects:**

A. 17th Ave Waterline Replacement (Mark)
**03:43 pm**: Preconstruction meeting next week, work to begin first of June. Budget of $825k, but we are looking to spend under that based on current estimates. So far, we are at $670k including design costs. The original idea for the project was pipe bursting, but the contractor suggested open trench and parallel pipe as a less expensive alternative. Testing, compaction, and concrete work is all online and ready to go. We are expecting the project to take 4-6 weeks, and traffic will be guided to one side of the road. Global Underground is the contractor; they have done a lot of work all around Colorado and seem like good people.

B. East Side Storm Sewer System Design and EA (Mark)
**03:46 pm**: This project is proceeding as planned. Environmental Assessment submitted to state in March. We got only minor comments back, and our consultant is addressing them. One comment on St. Vrain was, the State wondered how much area we were going to disturb. We won't know the answer to that until design is finished, so we drafted up the idea of it as our response. Our pipe would be a parallel pipe to what is already there, so it will keep any disturbed area to a minimum. We need the State to give a determination of minimal impact so we can proceed. We want to start construction late this year or early 2021, and then in 2021-22 we would move on to 35th Avenue. The deadline for SRF funding is 06.15.2020. It will be $7-9 million for these three projects. The biggest expense will be 66" pipe. Need to clean out existing pipes so they work better, add detention pond at 31st Street, and get the system working well so the water will go into the pipes evenly and stay out of the street. Clean up will go a long way toward making the system work better. We are going to build a storm sewer (24-26" pipe) on Trinidad as well, to get the water out of there, and we will pave Trinidad if we have the money. We need to get cost estimates first, then we will talk numbers and look at debt load. We'll be back to talk to you guys once we have more information.

Question: Re: debt service, isn't interest low right now? Answer: Yes, but there is a certain amount that we don't want to exceed in terms of dollars per month.

Question: Pond by K&G – where is that going to be? Answer: Between the sidewalk and the edge of US 85. We will excavate that out and flow the water east to the storm sewers.



DRAFT

C. Tuscany Tract O Non-potable System Design and Construction (Mark)
**03:53 pm**: You might have seen that Robby and his guys were out dewatering the Tract O pond so we can see what's down there. Proposals for complete topographic survey will be turned in tomorrow so that grading can be brought to where it should have been. Erosion will be fixed and the water will be redirected. There are holes to fill in, structure to stabilize, and pipe to be repaired. Irrigation plans are pretty close to 100% right now. We want to get this fixed and built out so that irrigation system is operational next spring. The pumps will be the first things ordered once we have design since they have a 2-3 month lead time. Construction and erosion control and lining the ponds will probably happen this fall. The budget for this is $925k; part of which was used to purchase tract O. We are estimating it we will have over $500k left to get the work done.

Question: Are the residents getting surcharged for this system? Answer: They will once it's up and running, yes. They'll have a 15-year surcharge in the ballpark of $10/month, as well as having cheaper water in the summer.

D. 2020 Water Usage Report (Rick)
**03:58 pm**: Presents COE water use projections for this year: 2,766.4 af. 2019 was under that. 2020 was estimated about the same as 2019. We are working on a 2% growth factor from 2021 onward, which puts us exceeding the cap in 2025. There will be a $145k cost for that. The City is also working to forestall the cap threshold through water conservation measures city-wide. Those ideas are looking good. This year's usage through April is right on target for expectations.

Question: With new contract coming in 2023, will any of this change? Will numbers still stay the same? Answer: The things we want to amend in the current IGA won't affect the cost of the cap. That fluctuates every year. 2023 may change who we get our water from—we are thinking about Central Weld water district, but it won't change our usage projection.

E. Willowbrook Non-potable System Acquisition (Rick)
**04:02 pm**: The seller has agreed to our price of $1.5 million and terms of payment. Sales agreement has come to the City for review. Closing is scheduled for October of 2020, after which City will take over operations: doing the work and receiving the revenue. Everything is progressing well.

City Comment: Acquisition of Willowbrook will prompt us to think of our non-potable system as a utility system. Board should look forward to seeing what that will look like. System will roughly double the non-potable system that we are managing and likely require more staff. The cost model that we brought before covered those expected increases. We will get the income from it too.

F. Northern Integrated Supply Project (NISP) Update (Rick)
**04:05 pm**: Work has continued in spite of Coronavirus. The schedule is that we have plans ready to begin construction by 2023. We have completion and acceptance of

State's 401 permit. Opponents have filed an appeal of that, but the City will be asking the Judge to throw out the request before the hearing. We are hoping to wrap that up quickly. All permits for NISP are up to date or on target for timely completion. There is a KOA campground on the Glade reservoir property that NISP purchased as a contractor yard. After the project is done, they would probably try to find a buyer for that campground. Design of the dam continues. Regarding wetlands mitigation: they elected to go with banks. Absolved of any further work we have to do on it. Also working on approval of permits.

G. Neville's Crossing Irrigation System Update (Rick)
**04:09 pm**: Work on the system is about 95% done. The only remaining work is to install a valve on the intake pipeline. We have to wait until pond is down in order to do that. That finally occurred yesterday, so the contractor is schedule to come in and install the valve in the next day or two. This will let us regulate how much potable water we use when we need to supplement the non-potable supply. Hopefully contractor will get the controls and plug in tomorrow and it will be back in service. We received a number of phone calls from local residents, so we contacted the HOA to get notice out to residents about why they don't have water right now. Pond will be refilled with potable water until GLIC water becomes available at the beginning of June.

**Wastewater Projects:**

A. Old Treatment Plant Lagoon Decommissioning (Mark)
**04:12 pm**: We are presently doing field work on what we need to do to decommission the old lagoons. Material in the bottom of the lagoons is not hazardous, we can just haul it away to the landfill. We are going to maintain Lagoon #3 as an overflow backup system. The goal is to get design done and permits in place by the end of the year, then do the work in 2021. East Side Strom improvements will go right through the old lagoon and save us money on that project. We have $200k remaining in our SRF dollars. $175k for planning and design. We will get cost estimates a little later on.

B. Wastewater Treatment Plant Capacity Review (Randy)
**04:15 pm**: Back in December, we started new approach on figuring current capacity and expected growth. We should see a draft next week of population projection and what that means in terms of sewage flow. We've taken some time to be very thorough on growth projections. Evans grew by about 10%, but we are anticipating that slowing to 2.9%. One of the things we have to look at is our existing land. What kind of development potential do we have? What annexations are immediately accessible? Multi-family, single-family? Will we have industrial and commercial? CDPHE re-classification covers a 10% capacity increase and the ozone unit will help too. Greeley is looking to have their St. Michaels lift station online late next year, which will remove 6-9% flow.

Question: How has stay at home order changed flow rates? Answer: Evans is a bedroom community, so our flows and loads increased. Currently processing 100k gal a day, and the load increased 5-7%. Staff could even tell when people started doing deep cleans on their houses.



DRAFT

**Other Projects:**

A. Development and Road Maintenance Update (Randy)
**04:21 pm**: As far as things not directly related to sewer and water, these are some of the big issues happening in Evans this summer.

- 1% sales and use tax for road maintenance was approved. Impact of that has already started.
- City Council approved another $500k to go into this year's road maintenance. That's a good amount of money for patching and doing chip seal work. That will cover a lot of streets all over town. Be ready for a lot of maintenance work.
- Four major capital projects:
  1) 47th Ave Widening – utilities this year. $4m to widen 47th from 37th Street to City limit.
  2) 23rd Avenue will be completing 2 lanes of what will be a 4-lane arterial from 37th south to 42nd. Developers will do the southern portion of that, the City will do northern part. Both projects will be ready to go to bid soon.
  3) 37th overlay is happening too. Working aggressively with CDOT and moving forward with final design and budgeting. Overlay from 17th Ave to the RR tracks. Only significant issue is that there are areas that need more than an overlay. They need to be reconstructed. We will have that done this summer.
  4) 37th Avenue Widening between 35h and 65th. Final design coming in the next few months.
- Mission Springs developments are moving along very quickly.
- Wildhorse at 47th Avenue, just south of Monte Vista Condos in Tuscany will break ground this summer.
- There's a nice storage establishment going in at 37th and Harbor Lane. 1 and 2 story climate-controlled storage.
- Reserve of Crescent Cove has been approved. Building permits should be happening in the next few weeks. 288 units in 12 buildings just north of their current development.
- Peakview's last hurdle is to get their Development Agreement approved. They have multinational financing coming from 5 different countries that finally came together last week.
- There is a Ziggi's coffee going in just east of Walgreens.
- And Roasty's coffee on 11th Avenue is already underway. That should be up and running this summer.

Question: For Peakview, are you going to close down 37th at 65th? Answer: May not be able to do the work in the roads until next summer (assuming that school will be back in session). They are not allowed to do that work while school is in session.

B. Evans Master Plan Update (Randy)
**04:29 pm**: Master Plans are typically renewed about every 5-7 years. Our is from 2010; it needs an update. This is an invitation to all of you: we would like one of you to be on the steering committee for this project. We want 2 council members, 2 PC members, 1 W&S



DRAFT

member, and a couple members of the public. Not a huge commitment. Couple meetings per month. Jeff or Glenn would be happy to help.

C. Master Plan Water Chapter Grant Assistance (Randy)
We got a grant from Sonorin Institute that does projects like this. Land use, water conservation, etc. We would like you folks' involvement as that goes along. Want to tailor our ideas with what would work in Evans.

Comment: Glad the City is doing that and getting other people involved.

D. Waterwise Grant for Demonstration Garden (Randy)
**04:34 pm**: City got $11k from Northern Water to demonstrate the landscaping use and beauty of water-wise xeric plants. City's project is the prominent corner just below the cemetery at 11th and the highway. It is in need of some beefing up so it will be redone and improved. Northern Water likes it because it's highly visible, we like it for the same reasons—it's a big entrance into the City.

Comment: Thank you to the City for doing that. The City needs to take the lead in xeriscaping for landscaping and gardens.

City Comment: If you haven't had the chance to do it yet, at the Northern Water headquarters there are a series of demonstration gardens showing everything from native plants to bluegrass. It's very scientific as far as how much water each plot takes, and in the summertime when everything is in bloom it is very interesting and beautiful.

Comment: It is well worth seeing.

Question: Is Parks and Rec getting involved in xeriscaping around the City? Answer: Yes, Parks will be doing that corner with Northern Water. And then doing other areas.

**5. ADJOURNMENT – 04:39 pm**
****Motion to Adjourn/Second. Passes unanimously.**

DRAFT

City of Evans, Colorado

# CITY OF EVANS

## 2019 MUNICIPAL WATER EFFICIENCY PLAN UPDATE

**DRAFT**

clearWATERsolutions
water rights • planning • engineering
1625 Foxtrail Drive, Ste. 290 Loveland, Colorado 80538
(T) 970.223.3706 (F) 970.223.3763
www.clearwatercolorado.com

# EXECUTIVE SUMMARY

The City of Evans, Colorado *(City* or *Evans*) is a Northern Colorado community located in Weld County. Named for Territorial Governor John Evans, Evans was established in 1869 and was known as the "Queen City of the Platte" and held the Weld County's seat of government. In its early years, Evans was a small 'wild west' town of 400 people. The City has grown into an urban community that values its rural roots and historical heritage. A variety of amenities for its residents make it a great place for families and businesses alike. The City has over 300 acres of parks and open space, biking trails by the river, shopping areas, and has easy access to major highways going to Denver, the Rocky Mountains, and the International Airport.

The City of Evans distributes water to a service area that includes customers in the incorporated City limits and portions of the unincorporated area. The City has an estimated population of 21,615 people[1] and encompasses 10.53 square miles or 6,740 acres. The City's Urban Growth Area is nearly three times the size of the current limits.

In an effort to optimize its water resources, the City of Evans developed this Municipal Water Efficiency Plan Update (*MWEP* or *Plan*) in accordance with the Water Conservation Act of 2004 and to meet the provisions of Colorado Revised Statute section 37-60-126. As part of CRS 37-60-126, a State-approved Plan will qualify Evans for funding from the Colorado Water Conservation Board (*CWCB*) and the Colorado Water Resources and Power Development Authority for water supply and delivery projects.

This report documents the City's water rights and systems, historical and projected water demands, planning process used to prepare this Plan, and targeted water efficiency activities to implement. Water efficiency planning was completed in accordance with CWCB's Municipal Water Efficiency Plan Guidance Document (*Guidance Document)*. The benefits of water efficiency activities may include: delaying the purchase of costly water supplies and infrastructure upgrades, reducing wastewater flows and treatment and associated costs, and improved water management and stewardship.

The City's existing water supplies consist of both treated water supplies and non-potable supplies. The City's raw water supplies come from trans-mountain diversions from the Colorado River and native streamflow in the South Platte River basin. Treated water supplies have an average yield of approximately 6,361 acre-feet (*AF*) per year. This Plan is intended to provide guidance to the City in developing water efficiency activities that complement its existing land planning activities, future economic developments, and community goals.

[1] Population in 2018 from the Colorado Department of Local Affairs, State Demography Office.

In 2018, the City's water demand was 2,663 AF of treated water to meet residential, commercial, irrigation and municipal customer usage, as well as non-revenue losses. The annual treated water demand is expected to increase due to population growth and new development to approximately 3,247 AF by the end of this Plan's planning period in 2028. Water savings from water efficiency activities developed in this Plan may save up to 498 AF per year of treated water demand. The savings from this planning effort will make a considerable contribution toward the water supplies needed to serve the 2028 demand.

### Past and Current Water Efficiency Activities

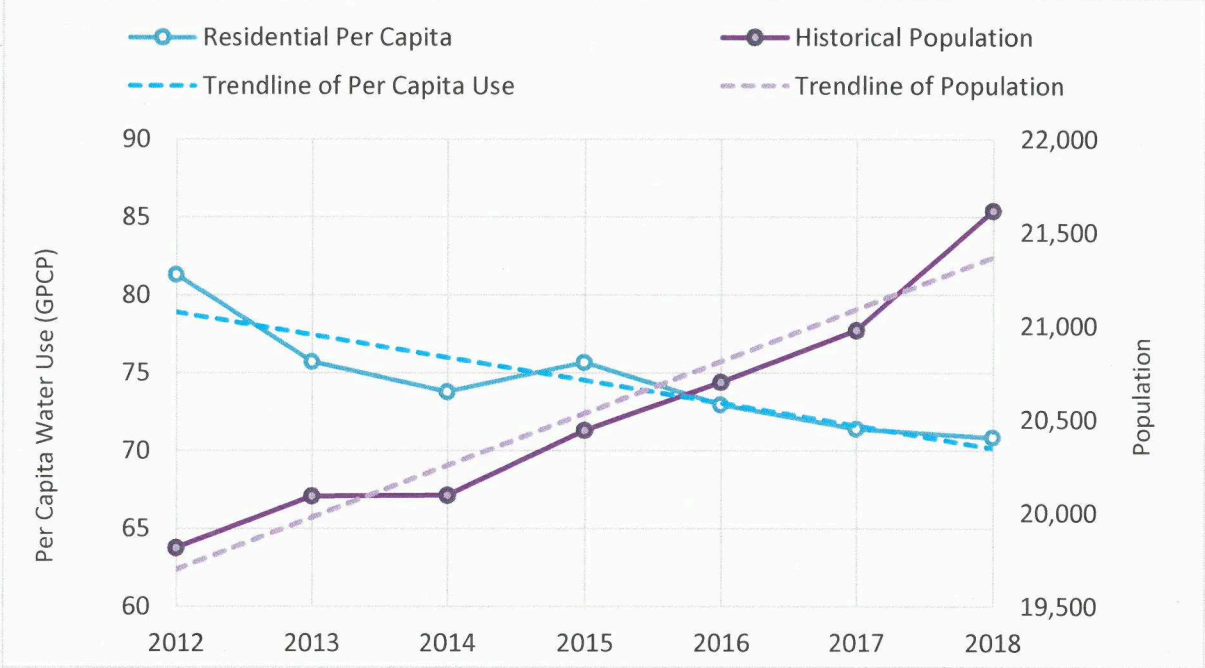
Evans has implemented several water efficiency activities prior-to and since its *2009 Water Conservation Plan*. The water efficiency activities that have been historically implemented are shown in **Table ES-1**.

**Table ES-1: Evans' Existing and Ongoing Water Efficiency Activities**

| Water Efficiency Activities | Approx. Date of Implementation |
|---|---|
| **Foundational Activities** | |
| Advanced Metering Infrastructure Installation and Operations | 2015 |
| Water Rate Study - Water Efficient Rate Structure with Regular Updates | 2001 (recent update in 2019) |
| Water Reuse System | Since 2010 and prior |
| Tap Fees with Water Use Efficiency Incentives (Lot-based water dedication) | Since 2010 and prior |
| Master Plans/Water Supply Plans/Integrated Water Resource Plans | 2016 |
| Drought Management Plan | 2013 |
| General Monitoring and Verification Activities and General Water Rates and Billing | Since 2010 and prior |
| Designated Water Conservation Coordinator | Since 2010 and prior; not consistently |
| **Ordinances and Regulations** | |
| Weekly and Time of Day Outdoor Watering Restrictions | 1982 |
| Water Waste Ordinance | 2002 |
| Irrigation System Standards for New Developments | 2004 |
| New Car Wash Standards (New Construction) | In development (anticipated 2022) |
| Landscape Design Ordinances and Restrictions | 2004 |
| **Education Activities** | |
| Public Education (Newsletter, Webpage, Interactive Website, Social Media, etc.) | Since 2010 and |
| Children's Water Fair or Festival | Since 2010 and prior; not consistently |

Water savings from water efficiency activities are challenging to quantify, especially activities that are highly dependent on human behavior, such as public education programs. Also, some water efficiency activities are not implemented consistently, such as a designated water conservation coordinator, so water savings can fluctuate from year-to-year. Without collecting specific data on each activity, a simple way to evaluate water savings as a whole is by calculating the City's per capita water use to observe trends. The City's residential per capita water use show a general downward trend in water use since 2012 as depicted in **Figure ES-1**.

**Figure ES-1: Treated Water Use and Population Trends**




The residential per capita usage decreased by 10 gallons per day per person from 2012 to 2018. Some of the variability in the per capita water use is likely linked to the yearly fluctuations in temperature and precipitation. For example, 2012 was a dry year which may explain the higher per capita water usage. This may be linked to increases in outdoor water usage during dry years. Other factors that may impact the residential per capita use is new developments with dual systems. While the residential per capita from treated water decreases, residents are using non-potable water for irrigation which can skew the per capita values. Based on the cost-benefit analysis, the projected saving from Evans' implemented water efficiency activities is 242 AF per year.

An initial set of water savings goals were developed in the beginning stages of this planning effort to guide the development of this Plan. The initial goals were used as a means to screen and evaluate potential activities to ensure the City's goals can be met

with the water efficiency activities evaluated. The following initial goals were established:

- The targeted water savings goal for this Plan will be to lower the treated water demand by 10% over the ten-year planning period, or approximately 1% per year.
- The targeted ten-year water reduction goals for the following customer categories were as follows:
    - Residential: 13%
    - Commercial: 5%
    - Irrigation: 5%
    - Municipal: 5%
    - Non-Revenue Water: 1%
- To develop a Plan that can be effectively implemented by City Staff and with City Council approval and encouragement.
- To implement water efficiency activities that are compatible with the community and residents.
- To develop a cost-effective program that achieves water savings goals while staying within budget constraints.
- To assess activities and programs with partnership opportunities.

The City of Evans used a four-phase process recommended in the *Guidance Document* to select and fully evaluate water efficiency activities for implementation in this Plan. The four phases include: 1) assessment; 2) identification; 3) qualitative screening; and 4) evaluation and selection.

During the initial screening process, City staff selected 35 potential water efficiency activities to evaluate in a cost-benefit analysis. During the second screening process, City staff eliminated one activity that didn't fit with the City's goals and interests. The City used the following criteria to screen potential activities:

- Applicability to the City of Evans
- Moderate to high potential reduction of water use and financially feasible
- Staff and City Council support
- Partnership opportunities with other entities to help organize and implement activities

The following 34 activities were selected for implementation by the City in this Plan:

- System Wide Water Audits
- Advanced Meter Reading Installation and Operations
- Water Rate Study – Water Efficient Rate Structures with Regular Updates
- Water Reuse System
- Tap Fees with Water Use Efficiency Incentives
- Leak Detection and Repair Program
- Master Plans/Water Supply Plans/Integrated Water Resource Plans/Capital Improvement Plans
- Drought Management Plan

Draft

- General Monitoring and Verification Activities and General Water Rates and Billing
- Designated Water Conservation Coordinator
- Slow the Flow Residential Indoor Audits
- Slow the Flow Residential Irrigation Audits
- Slow the Flow Commercial Irrigation Audits
- Rebates and Retrofit Program - Indoor
- Rebates and Retrofit Program - Outdoor
- Giveaways: Water Audit Kits
- Xeriscape Incentives – Garden in a Box
- Distribute Pre-Rinse Spray Heads to Restaurants and Institutions
- Restrict High Water Use Turn on Medians and in Parking Lot Plantings
- Weekly and Time of Day Outdoor Watering Restrictions
- Water Waste Ordinance
- Irrigation System Standards for New Developments
- 10% Lot Restriction
- Requiring Wind and/or Rain Sensors for Business and Open Space Irrigation
- Restrictive Covenants Ordinance
- New Car Wash Standards (New Construction)
- Landscape Design Ordinances and Restrictions
- Public Education Activities
- Children's Water Fair or Festival
- Post or Distribute ET Irrigation Scheduling
- K-12 Teacher and Classroom Education
- Property Manager/HOA Education and Training
- Citizen Advisory Board
- Xeriscape Demonstration Garden

**Table ES-2** compares the City's initial water savings goals at the beginning of this planning effort to the water savings estimated for the selected activities. Over a ten-year period, the selected activities are estimated to provide an overall water savings of 5,127 AF. This is an overall reduction from the forecasted water use by 17% which exceeds the City's initial water savings goal of 10%. This value is a ten-year savings for all the 34 activities.

Draft

**Table ES-2: Water Efficiency Goals Comparison**

| Water Use Categories | Total Projected Water Use (2019 to 2028) | Reduction Goals for Planning Horizon | | Adjusted Reduction Goals for Planning Horizon | |
|---|---|---|---|---|---|
| | | | | Total Water Savings from Activities | Resulting Reduction |
| | (AF) | (%) | (AF) | (AF) | (%) |
| Residential | 19,827 | 13% | 2,578 | 3,679 | 19% |
| Commercial | 5,671 | 5% | 284 | 901 | 16% |
| Irrigation | 831 | 5% | 42 | 213 | 26% |
| Municipal | 687 | 5% | 34 | 99 | 14% |
| Non-Revenue Water | 2,734 | 1% | 27 | 236 | 9% |
| Total: | 29,750 | | 2,965 | 5,127 | |
| *Total Percent Reduction:* | | | *10%* | *17%* | |

## Implementation and Monitoring Plan

The implementation plan defines the process necessary to develop the selected water efficiency activities. The City Manager will be chiefly responsible for coordinating and delegating tasks to City Staff to implement this Plan. The Public Works, Utility Billing, Engineering, Communication and Parks Departments will have roles in implementing some of the selected activities pertaining to their departments. For some activities, the City Staff may partner with other organizations offering tools and programs for municipalities, such as Resource Central, the Northern Colorado Water Conservancy District or the City of Greeley.

A monitoring plan outlines the City's process to monitor the progression of the implementation plan to ensure its success. The success of the stated goals is measured through monitoring of billing data, screening/evaluating activities acceptable to City staff, and soliciting City Council and community feedback on water efficiency activities. Monitoring various types of data is beneficial in tracking the water savings generated from implementing an MWEP. Evans monitors the produced treated water and the total billed water by customer category on an annual and monthly basis. Evans also tracks the number of taps per customer category and the City's population. The demand data, which will be collected during the monitoring period of the Plan, is presented in **Table ES-3**.

**Table ES-3: Selection of Demand Data for Efficiency Plan Monitoring**

| Monitoring Data | HB 10-1051 Reporting Requirement | | | | Selection | | | |
|---|---|---|---|---|---|---|---|---|
| | Annual | Monthly | Bi-Monthly | Daily | Annual | Monthly | Bi-Monthly | Daily |
| **Total Water Use** | | | | | | | | |
| Total treated water produced (metered at Master Meters from WTP) | | | | | | X | | |
| Total treated water delivered (sum of customer meters) | √ | | | | | X | | |
| Raw non-potable deliveries | | | | | | X | | |
| Per capita water use | | | | | X | | | |
| Non-revenue water | √ | | | | X | | | |
| **Water Use by Customer Type** | | | | | | | | |
| Treated water delivered | | √ | | | | X | | |
| Raw non-potable deliveries | | | | | | X | | |
| Residential per capita water use | | | | | X | | | |
| Unit water use (e.g. AF/account or AF/irrigated acre) | | | | | X | | | |
| **Other Demand Related Data** | | | | | | | | |
| Drought index information | | | | | | X | | |
| Population | | | | | X | | | |
| New taps | | | | | | X | | |

Draft