

Water plant expansion hits homestretch



Expansion of Loveland's Chasteen Grove Water Treatment Plant flanking the Big Thompson River west of the city is on track for completion this spring. Some features, indicated by map numbers, are described below right.

\$24M project moves on time, under budget

Of all the mantles that the City of Loveland is entitled to wear, a couple have stood the test of decades. One is the pure, clear drinking water that is delivered to Loveland taps, an amenity that residents rate higher than any other City service in annual Quality of Life surveys.

The second is the way the City manages and finances its growth, with major building projects in recent years finishing in the black.

The two come together at a place called Chasteen Grove, on the north bank of the Big Thompson River near the mouth of the canyon, where a \$24 million expansion of the City's Water Treatment Plant is approaching the finish line. The project, all but invisible to most City residents, is the most expensive and complicated building project since the 1988 Civic Center expansion.

As the work progresses on time, it is also moving along under its budgeted cost.

"The original contract was \$24.3 million, and we're down to \$23.9 at this stage," said Tom Greene, the Loveland Water & Power engineer who is managing

Plant expansion features in detail

- 1.** Nelson "Big Dam" raw water intake, diverting water from the Big Thompson River to the plant.
- 2.** New west chemical storage building, housing two giant tanks with capacity of 46 million gallons per day (MGD).
- 3.** Existing floc/sediment building, with 14 MGD capacity, built during 2007 expansion.
- 4.** Sediment basins dating from 1940 and, just above, new 8 MGD filter plant.
- 5.** New sand drying beds, for recovery of organic and mineral solids from the treatment process.
- 6.** The 4-million-gallon South Chasteen Tank, the plant's link to Loveland's treated water distribution system.

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HOMESTRETCH (from page 1)

the project.

“Our goal was to finish about 1.5 percent below the contract amount, and we’re blessed to be able to come close to that reduction so far.”

Given the number of components that the project entails – the thousands of linear feet of piping and electrical lines, the heavy concrete and structural steel building frameworks, the sophisticated and specialized array of equipment that each building houses – hitting a financial target is especially impressive.

The project boosts the plant’s daily capacity for treated water by 8 million gallons, adding to the 30-million-gallon daily load the plant was able to handle prior to expansion.

The need for that extra capacity should be evident to anyone driving around Loveland, taking in evidence of the home-building boom that is underway across Northern Colorado.

“A top priority is to meet the expected growth in demand for water as our population grows,” Greene said. “But, while we’re doing that, we also want to make our systems more efficient and resilient.”

Seasonal variations in the demand for treated water are striking: On a peak summer day, when outdoor irrigation hits a high-water mark, the Chasteen Grove plant might pump as much as 27 million gallons, just shy of its current capacity.

Lowest winter-day demand is less than a quarter of that, or about 6.5 million gallons daily.

The expansion’s design

Learn more online

More information about the City of Loveland’s Water Treatment Plant expansion is available online at CityofLoveland.org/LWPCConstruction. The latest report on the City’s water quality is also on the web at CityofLoveland.org/WaterQuality.



A view looking south across the sediment tanks dating from 1940, above, shows the new 8 MGD filter plant. **Below,** a 22,000 gallon tank in the new west chemical building was taking shape.

incorporates features that will make the next incremental increase in the plant’s capacity much easier and less expensive. For example, a new 8-million-gallon-per-day filter plant building is built with expansion in mind, and growing room a part of its footprint.

The original Loveland Water Plant building, dating from 1924, gave way to the new expansion. But a decorative brick cornice that topped the building, with the construction date inlaid, will be incorporated in a monument and dedication area that will fold the old into the new.

The monument will be adjacent to a surviving apple tree, part of a small orchard that once surrounded the old frame home that housed the plant’s caretaker, also a casualty of the expansion.

“We thought it was important to



bring that into the final plan,” Greene said. “It’s something the community would want us to do, I think.”

Crews responding to drainage issues from ice

Street crews have been responding to an increasing volume of calls coming in regarding the formation of “ice potholes” and drainage concerns.

Gutters along streets and cross-pans at intersections are full of frozen snow and ice. Relentless cold temperatures have prevented a melt-off that typically offers relief, leading to the development of drainage problems around Loveland.

The Streets and Stormwater Maintenance Divisions have committed 19 employees to the effort, in two separate crews tackling the growing list of complaints.

The calls are prioritized with these factors in mind:

- Those streets with higher traffic volumes that impact more drivers and create a higher safety concern are the crew’s highest priority.
- Blocked drainage gutters, causing water to back up and refreeze over adjacent sidewalks are also a high

priority.

- Ice potholes that form in intersection cross-pans and threaten to damage low-clearance vehicles rate a higher priority too.

Residential streets that are snow-packed but don’t have these more severe drainage issues are not being addressed immediately.

Streets and Stormwater ask for residents’ patience as they work to resolve these drainage complaints. Barring any new storms, crews will continue to assess and work through calls as they come in.

Residents who are experiencing a safety issue as described above are asked to contact the Public Works Department at 962-2524.



New outfall will improve drainage, reduce road closures on W. Eisenhower

Rainfall events on west Eisenhower Boulevard have historically created flooding problems which sometimes resulted in road closures due to the positioning of the roadway, proximity to the Big Thompson watershed, and an outdated drainage system that couldn’t accommodate measurable rainfalls.

To more efficiently direct water off the roadway and improve drainage in that area, in early December a new stormsewer conveyance system, designed in-house by the City’s Stormwater Engineering Division, was installed.

Before the improvements were made, an 18-inch corrugated

metal stormsewer pipe conveyed water from the north side of US Hwy 34 to the south side at Cascade Avenue. The pipe then entered an old irrigation system that eventually emptied into a small cistern. During even



The recently completed Cascade Outfall Project will improve drainage on W. Eisenhower.

NEED A SUMMER JOB?

SEASONAL

Summer Positions Available at:

Winona Outdoor Pool
Loveland Swim Beach
Batting Cages
Summer Camp

Also Hiring for:

Chilson Positions
Youth Athletic Coaches
Tennis & Gymnastics Instructors

Positions Posted Mid-February!

Applications & Openings are Online:

www.CityofLoveland.org/jobs

Apply Early & Be Part of the FUN!

Chilson
Recreation Center



700 E 4th Street • Loveland, CO • 970-962-2FUN

Registration for Youth & Adult Spring Athletic programs going on NOW! See the Spring Leisure Times activity guide at cityofloveland.org/leisuretimes for specific program information, or call 962-2383.

moderate rainfalls the limited capacity of the cistern would cause water to overtop the road and flow through the properties adjacent to the highway.

The recently completed ‘Cascade Outfall Project,’ which included installation of approximately 800 feet of 18-inch high-density stormsewer pipe, will provide a great deal of drainage relief to local residents and help reduce road closures along Hwy 34.

In addition to the new pipe, the new system contains four manholes, one inlet and a concrete headwall outfall.

The project was done by Mountain Constructors at a cost of \$165,000.

Volunteers needed for educational programs

The City's Open Lands Division is actively recruiting adult volunteers for two natural area programs.

Environmental Education Program

Volunteers educate grade school children about wildlife, local plants and urban natural areas during field trips to River's Edge Natural Area. There is also opportunity for public adult, family and pre-school environmental and outdoor education programs.

Trail Host Program

Volunteer trail hosts for Open Lands are trained to assist visitors and answer questions about natural area sites including natural history, site information and regulations.

To sign up or request more information, go to cityofloveland.org/openlands, call 970-217-3173, or email Michele.VanHare@cityofloveland.org.

No experience is necessary and all training is provided at no charge. Background checks are required.



Chilson Rec Center

Spring Break Passes

ON SALE MARCH 8TH

Passes are good for **UNLIMITED** use of the Chilson Center during **Spring Break: April 2 - 10**

Youth = \$12 Adult = \$17

Call 970-962-2FUN for info

Chilson Recreation Center 700 E 4th St. 962-2FUN www.CityofLoveland.org

Chilson offering classes and programs for all ages

The Chilson Recreation Center is offering a number of fun and educational classes and programs for everyone from age 2 to 92 this winter and spring, including the following:

- L'il Sprouts cooking - ages 2-4
- FITKIDZ! - ages 3-5
- Little Architects - ages 2-5
- TCDC Wildcat Cheerleading - ages 5-14
- Spring Break Art Camp - ages 6-12
- Silversmithing - ages 12+
- Aromatherapy & essential oils - for ages 16+
- Herbalism & gardening - ages 16+
- Amazing Athletes - ages 1.5 - 5
- Blended Martial Arts for Kids and Adult Self Defense
- Legacy Cooking Program - ages 2-13 and their senior citizen buddies, and much much more.

Visit cityofloveland.org/Chilson or call Pam Greaney at 962-2446 for more information.



Photo: Danja Barber Photography

NIGHTLY FIREWORKS * FOOD TRUCKS * LIVE MUSIC * MUSICAL LIGHT SHOW

LOVELAND FIRE & ICE FESTIVAL

ICE SCULPTURE CONTEST * ENTERTAINMENT * FREE CARRIAGE RIDES

VALENTINE'S DAY WEEKEND IN DOWNTOWN LOVELAND
FEBRUARY 12, 2016 5PM - 10PM
FEB. 13 & 14, 2016 10AM - 10PM

LOVELAND FIRE & ICE FESTIVAL PARTNERS & NON-PROFITS

www.LovelandFireAndIce.com

City Update is a monthly publication of the City of Loveland. Residents receive City Update according to their utility billing cycle. Timeliness of the information may be affected by recipients' billing schedule. City Update is also available around the first of every month on the City's website at www.cityofloveland.org. Your comments are encouraged and welcomed at 962-2302, or Tom.Hacker@cityofloveland.org. The City of Loveland is committed to providing an equal opportunity for citizens and does not discriminate on the basis of disability, race, color, national origin, religion, sexual orientation or gender. The City will make reasonable accommodations for citizens in accordance with the Americans with Disabilities Act. For more information, please contact the City's ADA Coordinator at 962-3319 or Bettie.Greenberg@cityofloveland.org.

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STORMWATER ENGINEERING - KEEPING STORMWATER

One of the City's Stormwater Engineering Division's goals is to keep Loveland's waterways clean and free of pollutants and debris. Stormwater also maintains and upgrades infrastructure to protect our community from water-related problems such as flooding.

COLORADO WATER FOURTEENERS



Coloradans enjoy some of the best water in the West. Let's keep it that way by doing our part to protect our beautiful rivers and water quality. Remember, we all live downstream. What happens upstream affects those downstream.



Brought to you by ColoradoWaterWise.org

COLORADO WATER LIVE LIKE YOU LOVE IT



1 DISPOSE OF MEDICINE PROPERLY

Dispose of medicine using a designated take-back program, not by flushing it down the toilet.



2 DON'T FILL STORM DRAINS

Avoid placing anything but water in a storm drain. No oil, pesticides, fertilizer, paints, etc.



3 PICK UP PET POOP

Pet waste can run into storm drains and spread bacteria.



4 FIX THE OIL LEAK

Car leaks can spread oil into the water supply.



5 DIRECT YOUR DOWNSPOUT

Ensure downspouts are pointed toward the lawn or plants, not the sidewalk.



6 DON'T FLUSH

Don't flush garbage down the toilet.



7 REDUCE PAVED AREAS

Reduce paved areas with porous pavement materials and plantings that will allow water to soak through and not run off.



8 SWEEP

Dirty sidewalks and streets run into the storm drain and pollute our water.



9 USE SAND OR CAT LITTER

Use sand or cat litter to de-ice sidewalks instead of salt, and sweep up after the ice has melted.



10 LOSE THE LANDSCAPING FABRIC

Weed fabric slows water from entering soil. Mulch is better at controlling weeds.



11 FOLLOW DIRECTIONS

Always follow the manufacturer's label for storage, use and disposal of all household chemicals.



12 USE PESTICIDES SPARINGLY

Use pesticides and fertilizers sparingly and consider hiring a professional applicator when necessary.



13 USE A CERTIFIED CAR WASH

A certified commercial car wash is more water efficient and does not send soapy water down the driveway and into the storm drain.



14 COMPOST

Compost and amend soil. Healthy soil acts as a water filter.



CALENDAR OF STORMWATER EVENTS

CHILDREN'S DAY CELEBRATION

4/18/2016

EARTH DAY EVENT

4/30/2016

LOVELAND'S WATER FESTIVAL

5/12/2016

DOOR-TO-DOOR HOUSEHOLD

HAZARDOUS WASTE PICK-UP FOR

SENIORS AND DISABLED

5/6/2016 and 5/7/2016

PUBLIC WORKS DAY

5/17/2016

PASSPORT TO WATER & POWER

TBA Later

DOOR-TO-DOOR HOUSEHOLD

HAZARDOUS WASTE PICK-UP FOR

SENIORS AND DISABLED

10/6/2016 and 10/7/2016

ANNUAL WATERWAY CLEAN-UP

10/8/2016



FOR MORE INFORMATION ON THE CITY OF LOVELAND'S STORMWATER DIVISION: 970-962-2772

www.cityofloveland/stormwater.org
Or find us on Facebook



@LoveColoradoWater



@LoveCOWater

REV: 141015

COLORADO WATER LIVE LIKE YOU LOVE IT

COLORADO WATER IS VERY POPULAR • That's because a lot of people depend on it. The snow that falls in the Colorado Rockies not only provides water to about 5 million Coloradans, but also to people living in 18 other states. Colorado is the only state other than Hawaii where water flows out of its borders, but doesn't flow in.

WHAT CAN YOU DO TO LIVE LIKE YOU LOVE IT?

USE FERTILIZERS AND PESTICIDES SPARINGLY

Over application of fertilizers and pesticides can result in runoff that carries toxic levels of chemicals or excessive nutrients into our waterways. Nutrients such as phosphorus and nitrogen encourage excess algae growth and water quality decline.

- **FOLLOW INSTRUCTIONS.** Read labels on lawn chemicals carefully and always apply products sparingly.
- **GO NATURAL.** Consider compost or natural lawn chemical alternatives. Composting creates natural, slow-release fertilizer and soil-enhancing material.
- **BE AWARE WHERE YOU FERTILIZE.** Use caution on slopes and lawn edges so fertilizer will not wash into nearby storm sewers or waterways.
- **LET FERTILIZERS DRY PROPERLY.** Allow proper drying time for liquid chemicals, and never use lawn chemicals before a heavy rainfall is expected.

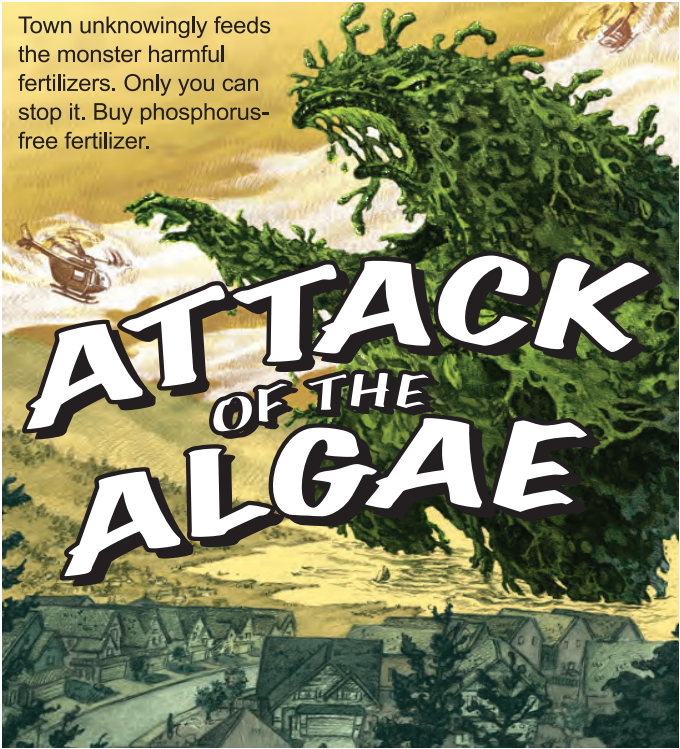
USE A COMMERCIAL CAR WASH

When a car is washed in a driveway or street, this is essentially like washing the car in a local creek. Though not illegal, this practice is not the best for water quality as car wash water can contain fluids from engines, heavy metals from brake wear, and phosphorous from the soap and dirt. Ideally, cars should be washed at a commercial carwash where the water is sometimes reused and is always discharged to a treatment system. If you or someone you know is planning a carwash fundraiser, ask a local carwash if you can use one of their wash bays. Encourage your friends, family and neighbors to wash their cars at commercial car washes.

DON'T FEED STORM DRAINS

Discharging materials such as soaps, solvents, oil, trash, sand, yard clippings, paint, or other materials into the municipal separate storm sewer system, roadways or drainage ditches, is considered an illicit discharge. Pollutants that flow through storm drains into the storm sewer system go directly into streams and waterways without being treated. This pollution impacts aquatic life, wildlife and people who recreate and fish.

Town unknowingly feeds the monster harmful fertilizers. Only you can stop it. Buy phosphorus-free fertilizer.



Rainwater can quickly wash phosphorus from fertilizer into our water system. Phosphorus is like junk food for algae, causing it to grow out of control, turning our waters green, lowering water quality and even killing fish. Use phosphorus-free lawn fertilizers to keep it clean.

H₂O ONLY
KEEP IT CLEAN

THE ANNUAL SPRING WATERWAY CLEANUP WILL BE HELD IN THE FALL!

Look for more information in future City Updates