### New water line increases robustness, redundancy of entire system

When the Big Thompson River came tearing down the canyon last September it brought with it a level of destruction few had ever seen. For a few tense days, those treacherous waters threatened to destroy every water line transporting drinking water to City residents. Most people didn't know how dangerously close they came to losing their water completely.

Two of the three water lines that ran from the water treatment plant were destroyed by debris and the raging currents. Only one line survived the flood. Although that 48-inch line was not protected from the water, it held steady until crews could re-route the river and alleviate the pressure on the remaining line.

Loveland Water and Power (LWP) is working hard to ensure that the water supply is safer and more reliable than ever. In March the Water Division began construction of a new 48-inch water main that will run parallel to the existing 48-inch line. The line will span approximately one mile, heading east from the water treatment plant to town. The project has been on the fast-track since the system sustained damage in the flood.

"This is the most important pipeline in the City because it provides a new



redundancy and reliability to our system," said Chris Matkins, water division manager. "The great work of the staff made it possible to get the project rolling when a project of this size and magnitude usually takes at least a year. Our staff does incredible things for our customers."

The new 48-inch steel water line was designed to reduce the risk of damage from a future flood event. The line will be buried more than 20-100 feet farther from the river than the existing line. All pipe joints will be reinforced with welding, preventing the pipeline from pulling apart like the damaged 20-inch and 36-inch lines did in September. The project

Crews worked to move the river back to its original path approximately two weeks after the flood last September. A new waterline, placed farther from the river than the two previous lines, will help the entire system be more resilient and resistant to damage from future floods.

also includes additional structural reinforcements to prevent the river from washing out the east and north banks where the new line will reside. The new line will also provide greater flexibility for maintenance crews.

Because the system sustained such heavy damage in the flood, FEMA will fund a portion of the project. LWP hopes to complete construction of the new line by late June, just in time for the heavy irrigation months.

# Know what's below... Call 811 before you dig

All kinds of utility lines, pipes and cables may be buried below ground on homeowners' property. In some cases they're close to the surface and easily damaged by even shallow digging, which can result in service interruptions.

That's why every digging job, from planting a single shrub to installing a

fence, should be proceeded by a call to 811 to have utility lines marked. Simply tell the operator where you're planning to dig and what type of work the project involves. The affected local utilities will send a locator to the property free-of-charge. Then it's safe to dig.



Know what's below. Call before you dig.

#### UTILITY NEWS • UTILITY NEWS • UTILITY NEWS • UTILITY NEWS

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GARDEN

IN-A-BOX

### Save water—beautify the landscape

The Center for ReSource Conservation (CRC) is offering Garden-In-A-Box (GIAB) kits again this spring. For many years CRC has partnered with professional landscape designers to create easy-to-plant xeric gardens that flourish in this climate and provide customers with a lowcost way to beautify their landscapes.

The kits include everything needed for water-saving gardens and feature beautiful perennial plants that look attractive from spring to fall. GIAB kits include a professional 'plantby-numbers' design that covers a 70-100 square-foot plot, a selection of 15-29 ready-to-plant perennials in 4-inch pots, and planting and care instructions.

Replacing a bluegrass lawn or a high water perennial garden can save up to 50 percent of the water used in typical outdoor irrigation.

Loveland Water and Power (LWP) has partnered with CRC to offer these garden kits at a reduced price. LWP residents get a \$25 discount off the full price of an approved,

perennial xeric garden. Efficient watering options such as drip kits and control clocks, planting services and consultations, and a vegetable garden are also available.

> Garden quantities are limited. To order go to GardeninaBoxCO.org or call 303.999.3820 ext. 222. Gardens will be available for pickup May 17 at the Loveland Service Center, 200 North Wilson Ave.

"Having it pre-designed by a master gardener eliminated the research and blanning time for me."



Working on your sprinkler system

If you are planning to install a new sprinkler

sprinkler system, you must meet the

Permits are free and required for all

homeowners and contractors.

system, repair, expand or modify your present

requirements of the Loveland Municipal Code

and the Colorado Cross-Connection laws.

this spring?

Don't forget to get

our Lawn Sprinkler

Permit.



www.cityofloveland.org/audits

or call 1-866-973-9268

To obtain a permit or for more information visit: www.cityofloveland.org/Backflow or call: (970)-962-3721

Properly owners can perform normal maintenance activities on their sprinkler systems including replacing sprinkler heads, repairing a leak or adding additional zones without obtaining a permit







April 2014

Volume 10 Number 4



### Fragile Big Thompson River will swell with one of history's biggest runoffs

onsider all the good news before absorbing the bad.

Farmers along the Front Range and in eastern Colorado will not worry this year about water for crops of corn, beets, onions, and alfalfa.

City dwellers and businesses likely won't be faced with water shortages and use restrictions.

Remember the drought? It's over. 2014 will be a great water year.

Ninety percent of the water consumed by farms, homes and businesses in Colorado comes from the melting Rocky Mountain snowpack. And, so much snow is piled high in the mountains this year that the spring runoff carried by Front Range rivers will be one of history's most bountiful.

But "bountiful" might not be the first word that comes to mind among riverfront property owners, Loveland parks managers, engineers, road

builders, emergency responders and others for whom the Big Thompson River is more foe than friend

The river that flows nearly 10 miles west to east through Loveland was so vastly changed by September's flood that all that melting snow will almost certainly cause problems when the river reaches its annual peak, typically in late May and early June.

"Some of the things we're most concerned about are that the flood has changed the river banks, the capacity of the riverbed and even the course of the river," said Loveland Fire Rescue Authority's Capt. Pat Mialy, Emergency Manager for the City of Loveland.

"Because of all that, we don't know how the river is going to react."

Mialy in March began working with other City employees, from engineers to first responders, on the job of preparing an Incident Action

feeds the Big Thompson River covered peaks and valleys in Rocky Mountain National Park.

Plan for the spring runoff in the Big Thompson.

As April approached, the team was still scanning a long list of unknowns in pondering the planning process.

How warm will May be? How wet? How much water will be spilled from Olympus Dam as Lake Estes fills, as it surely will?

And, how much more snow will add to the accumulation that is already way above average?

The group will on a daily basis crunch the numbers from the National Weather Service, looking at near-term and long-range forecasts.

They will digest data from the U.S. Natural Resources Conservation Service, the agency that measures the mountain snowpack with a network of automated reporting stations.

(continued on page 2)

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Daily scans of the U.S. Bureau of Reclamation's website will tell them how much water is where in the agency's vast water transport and storage system.

Meanwhile, City engineers and heavy equipment operators will continue the work that has been in progress for the half year since the flood, doing triage on trouble spots along the Big Thompson's Loveland

No one knows for certain how much water came through the City in the flood that began Sept. 12 and continued for more than a week

Gauges that measure the flow were either washed away or overtopped by so much water that their data was meaningless.

#### Making a new river

But it was enough to change the river's shape in innumerable places. As it gushed out of the narrow canvon, it became a broad blade mowing through riverfront homes and businesses.

It jumped out of its channel, and braided new courses for itself through parks, a golf course, private land and a City-owned natural area that was set to open for public use in late September.

The river ripped and roared through dry land that it had never touched before, in one case threatening to sever the city's main water supply line.

An army of Loveland employees and private contractors is now racing to beat the clock that ticks toward the runoff's peak.

Triage has been underway since the September flood, with work concentrated on those locations viewed as most vulnerable in the spring. Mindful that rising water will pick up and move material scattered



by the flood, crews are working to contain debris before it poses new danger.

The City's biggest trouble spot in September was the point where the Big Thompson passes under South Lincoln Avenue (U.S. Highway 287) south of downtown Loveland.

Upstream from the bridge, the river had overtopped and destroyed Railroad Avenue and the adjacent tracks, carved a new channel through Fairgrounds Park, inundated the City's fire training center and cascaded over Lincoln Avenue into businesses along the strip.

### Big Thompson teamwork

In March, the City and the Colorado Department of Transportation and two private contractors mounted an effort to minimize chances that spring's runoff flow would do the same.

The Big Thompson had scoured its own riverbed so deeply, and undercut the adjacent bridge structures, that fixing the river itself was as much a focus as fixing the bridge and the City's Recreation Trail that passes under it.

The work meant moving the river, first south, then north, with temporary dams while giant boulders were used to reconstruct the riverbed Huge boulders, called rip-rap, are being hauled around Loveland to armor the river banks and as in this photo from the South Lincoln Avenue bridge project, reconstruct the riverbed.

Greg Muhonen, a Loveland Public Works Department civil engineer who manages the Lincoln Avenue bridge project, said he was gaining confidence that the reconstruction of the bridge underpinnings, the trail, a concrete floodwall – and the river – would stand the spring test.

"To be candid, I haven't been highly worried about it," Muhonen said. "We set a project timeline that would have us out of the river by April 1, and we're on track. ... I worry only about those things we can control. I guess that's one reason it hasn't shaken my world."

While imagining the best outcome might be easier for engineers, planning for the worst still will occupy Emergency Manager Mialy and members of the incident action plan team.

"We will preplan," she said. "We will identify the areas that probably will see flooding, and we make sure that the property owners and residents are aware of the timeframe to start watching. ... The power of the river is not something to discount."

# New safety program focuses on education, partnership

Safety, partnership and support are the hallmarks of a new safety assessment program for local businesses through Loveland Fire Rescue Authority (LFRA).

Since the beginning of the year, City fire crews have been visiting area businesses to meet business owners face-to-face, familiarize themselves with the structure, and most importantly, help ensure that the facility is well-equipped and functioning in a way that promotes safety for everyone in the building.

"Our goal is to partner with local businesses and educate them on how to make their business as safe as possible for themselves, their customers and fire crews if the need arises," said Lt. Kurt Willson who oversees the program. "Businesses not only benefit from the assessments now, but, in the event of an emergency such as a fire, increase their potential to recover from the emergency more rapidly and resume

normal operations."

According to Willson area businesses have been very receptive to the safety visits. "We have found that business owners appreciate the education we are providing. And for our guys, having the lay-of-the-land before an emergency, increases their ability to be safer and more effective in putting out a fire or whatever they're dealing with," said Willson. "If our guys know exactly where the exits are, and if the sprinklers are functioning well, that gives them a leg up when it's time to react," Willson added.

If crews do identify a safety issue that needs to addressed, they make recommendations and provide additional resources and contacts to help business owners remedy the issue.

There is no charge to businesses for a safety assessment. For more information call Lt. Kurt Willson at 962-2828 or go to the LFRA web pages at cityofloveland.org.

# Like local history and riding a bike?

Enjoy both along with the City and Historic Preservation Commission for the first Tour de Pants bike ride and celebration, 8-11:30 a.m., Saturday, May 3.

The ride begins at the Medina Family Cemetery and ends up at the Loveland Museum/Gallery. The approximately 3-mile ride includes historic stops and information along the way. Then the celebration continues at 9:30 a.m. at the museum where attendees can learn more about Loveland's unique history, see the leather breeches worn by Mariano Medina – considered to be Loveland's first permanent settler – and enjoy some great food, fun and kid-friendly activities. Those who

don't want to do the ride can go directly to Peters Park at 9:30 a.m. Reservations are required for both the bike ride and celebration as space is limited.

This event is part of the City's observance of Historic Preservation Month. For more information go to www.cityofloveland.org/ preservationmonth or to make reservations email Nikki.Garshelis@ cityofloveland.org.

wastewater system.

# Learn about City services May 20

The 11th annual Public Works Day will be held 9 a.m. to 1 p.m., May 20 at the Loveland



Sports Park. The day will offer children and families a glimpse into many of the diverse services the Public Works and Water and Power departments provide our community on a daily basis.

Each year, City departments create an engaging and dynamic learning environment that's both fun and educational. This year's event includes a water wheel that allows students to experience a flooding rain, an equipment show highlighting the machinery used around the City daily, and demonstrations on the power of electricity and the water/

Educational booths include displays of school zone signs, information on recycling, and energy use around the community. New online mapping tool personalizes City for each user

What makes Loveland a healthy happy place to live, learn, work and play? How can it be even better? To discover the answers to these questions, CanDo Loveland has launched an online mapping tool called, imap♥land.

Users can go to www.candoonline.org and click on the imap♥land icon to register and create an individual map of Loveland identifying things they think are important. Symbols can be placed on the map marking locations community members like and frequent, or dislike and avoid. The map can include places to play and recreate as well as sources of food which could include a neighborhood vegetable garden, local food bank, grocery store or restaurant. Users can also mark routes for walking or biking. The end result is a map of Loveland from each user's personal perspective. CanDo and the City of Loveland

want residents' input on what 'healthy imap eating and active living' look like in Loveland as well as what barriers might exist that would prevent residents from enjoying an active, healthy lifestyle.

Imap♥land provides a creative and effective means for community members to participate in the discussion. The information will be used to guide CanDo's future neighborhood outreach efforts and to inform the City's new Comprehensive Plan now underway. Incorporating public health goals objectives and policies into the Comprehensive Plan will help not only maintain but potentially improve Loveland's vibrancy.

For questions or more information, email katie.guthrie@uchealth.org or call 667-2192.

## Parks and Recreation asking for additional public input on master plan

The Parks and Recreation department would like to invite the public to an open house to review the findings from the update of the Parks and Recreation Master Plan. The open house is from 4:30-7:30 p.m., Tuesday, April 29 at the Chilson Senior Center.

Through a series of intercept events, focus groups and surveys, citizens have communicated their

priorities and preferences for City parks, recreation facilities, open lands, trails, golf courses, events and programs. Standards, policies and guidelines have been updated to guide development and operations.

Additional information on the master plan update can be found at www.CityofLoveland.org/ PRMasterPlan.

with Disabilities Act. For more information, please contact the City's ADA Coordinator at Bettie. Greenberg@cityofloveland.org or 962-3319.







700 E 4th St, Loveland, 970-962-2783

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, 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

