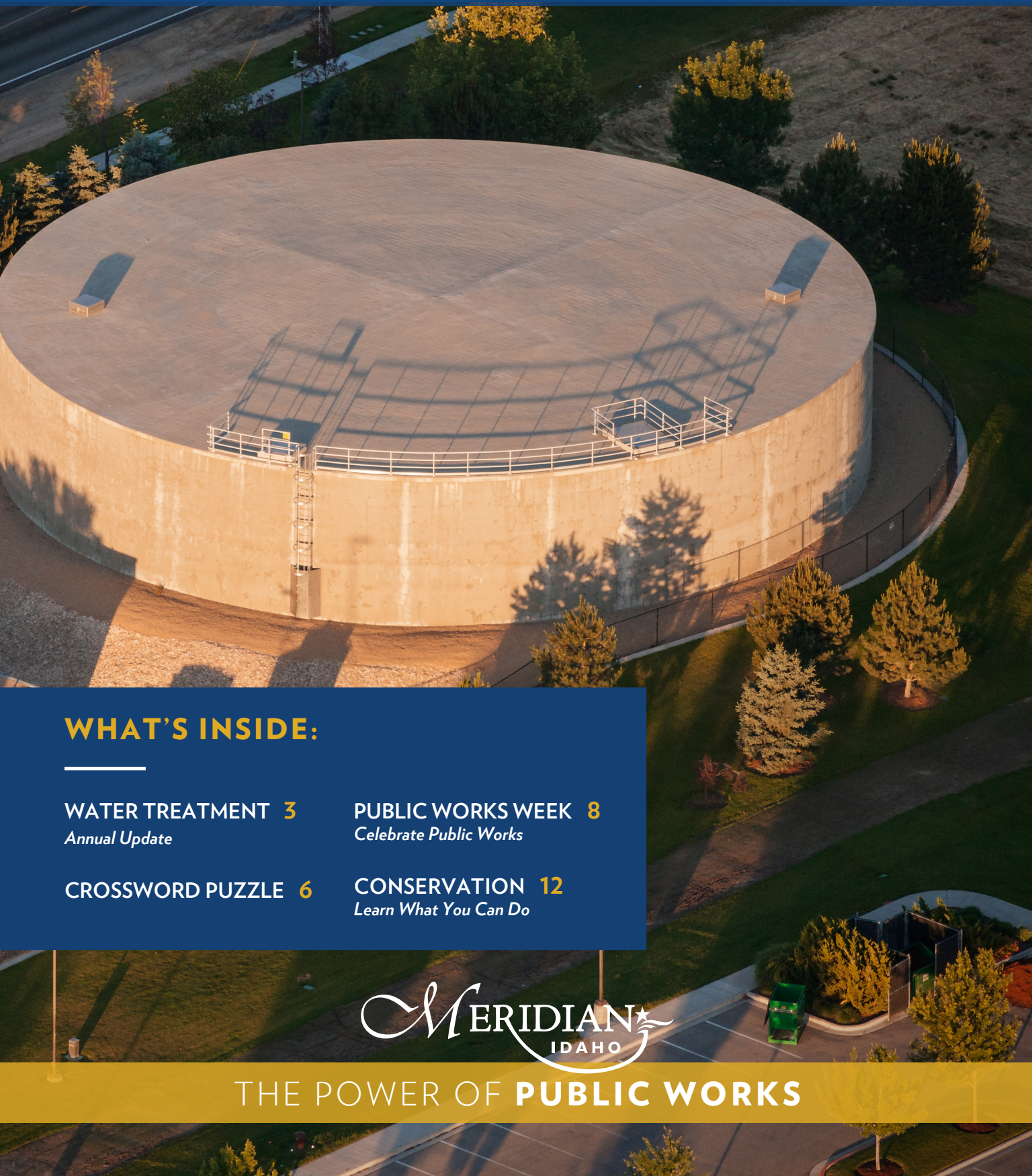




CITY of MERIDIAN 2018

ANNUAL WATER REPORT



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THE POWER OF **PUBLIC WORKS**

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THANK YOU

The Water Division would like to extend a Thank You on behalf of the City for making Meridian your place of residence! It has been another busy year with explosive growth and development for not only the City but also the Water Division.

Through new technologies, and continuous testing and monitoring, we are able to provide safe, high quality drinking water that meets or exceeds State and Federal drinking water standards.



WATER SOURCES & TREATMENT

OUR WATER SOURCES

In Meridian, drinking water comes from any of the 26 different wells located around the City that draw groundwater from three underground aquifers. An aquifer is a natural, underground layer of rock or sand that yields water. Groundwater is found in the spaces between the rock and sand. The water is drawn up through the wells, disinfected (treated in some cases) and distributed through 558 miles of water mains to your home.

This piping system services 34,000+ residential and commercial connections across five pressure zones, 24 hours a day, 7 days a week. The Meridian Water Division continually monitors and performs water quality tests (over 10,000 last year) in order to ensure water quality within our distribution system is maintained. This ensures all drinking water delivered to you meets or exceeds regulatory requirements and is safe to drink!

Last year, Meridian customers used 3.4 billion gallons of water for its commercial and residential needs.

▶ Well #27 Treatment Facility



WATER TREATMENT

Water that requires treatment is pumped out of the ground and into a pressurized treatment vessel. This water is then sent through a special filter that removes the iron and manganese molecules that contribute to brown water. This filtered water is then disinfected and sent into the water distribution system and to your home.

The City continues to explore alternative treatment techniques to increase our options and provide the optimal treatment process for each of our unique water sources. Of course, these studies and construction of such complicated treatment facilities take time and resources. We plan to complete our water treatment remediation projects for existing wells by 2023. This includes the completion of 3 additional treatment facilities that would serve the southern areas of the City.

We treated over 1.2 billion gallons of water, providing a significant improvement in water quality throughout Meridian's downtown corridor and western portions of town.

With the completion of these treatment facilities, we are seeing significant improvements in iron and manganese removal and the reduction of brown water occurrences City-wide. We appreciate your patience as we strive to improve the quality of the water delivered to your home.



BACKFLOW PREVENTION & CROSS CONNECTIONS

BACKFLOW PREVENTION IS IMPORTANT TO US ALL

A Cross Connection is a link between a consumer's drinkable (potable) water and potentially contaminated water lines, such as irrigation lines, private wells or tree and flower planters. If there is a change in pressure, water can flow backward into your home's plumbing and into the City's system. This is known as backflow and it can pose serious health risks.



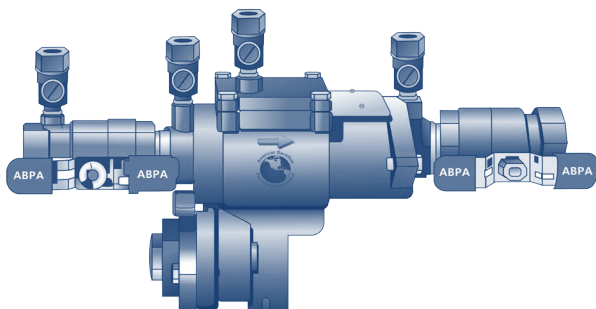
You could have a problem with backflow and not even know it. Irrigation systems, fire suppression systems, or just an everyday garden hose can cause undesirable or potentially harmful contaminants to enter into your potable water system without warning. Because of the

potential hazard cross connections can pose to you and the water system, the City of Meridian actively enforces the ordinances concerning backflow (section 9-3).

TESTING REQUIREMENTS

City and State of Idaho ordinance, 9-3-1, requires annual testing for all of the thousands of existing backflow prevention assemblies located throughout our City. Backflow prevention assemblies range from small vacuum breakers on household irrigation systems to larger double check and reduced-pressure principal assemblies for commercial applications. These tests must be submitted to the City.

EXAMPLES OF BACKFLOW PREVENTION DEVICES



▶ Reduced Pressure Backflow Assembly



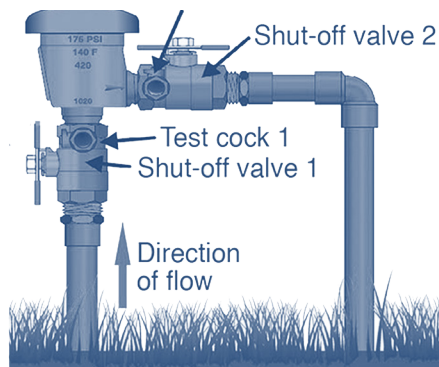
REDUCING YOUR COSTS

The City of Meridian understands the inconvenience of incurring this testing cost and offers a \$10.00 credit on utility bills to those who test their assemblies on time. Visit the Water Division's section of the City website at www.meridiancity.org/backflow for an updated list of local professionals who can perform this testing for you.

DUAL CONNECTIONS

Dual connections are physical connections between potable water (drinking water) lines and pressurized irrigation water lines. Connections between these two different sources can be dangerous as irrigation water is not meant for direct consumption. These connections are not allowed and must be removed per **City Resolution 10-763**. Please help us by doing your part and remove these potential contamination sources.

If you are not sure if you have the proper backflow protection on your plumbing system or if you have a possible Dual Connection in need of removal, please contact the Meridian Water Division at 208.888.5242 or at backflow@meridiancity.org. We would be glad to help.

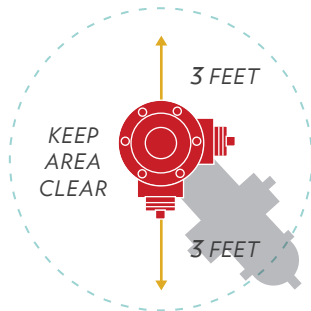


▶ Pressure Vacuum Breaker Assembly

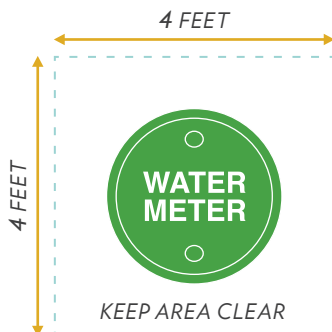
METER & HYDRANT CLEARANCES

It is of great importance and critical to public and emergency worker's safety to keep your meter and fire hydrant clear of landscape and fencing. We understand homeowners prefer to make aesthetic landscape adjustments, but clearance around City water infrastructure such as meters and fire hydrants is critical for ensuring the safety of emergency workers, citizens, and staff. When these features are obstructed, valuable time is lost on gaining access instead of concentrating on the emergency at hand. Any obstruction remaining after proper notification will result in the City taking corrective action to clear the area. Please contact the Water Division if you have any questions regarding required clearance at water@meridiandcity.org or 208.888.5242.

CLEARANCE REQUIREMENTS



Fire Hydrant Clearance:
Maintain a (3) three foot clearance around the circumference of the fire hydrant. This is per the International Fire Code Section 508.5.5.



Water Meter Clearance:
Maintain a 4 X 4 square foot clearance with the meter at the center. This is per City Code Section 9-1-33.

FIRE HYDRANT PAINTING COMMUNITY SERVICE PROJECT



Are you a Cub Scout, Eagle Scout, or just a resident looking to give back to our community?

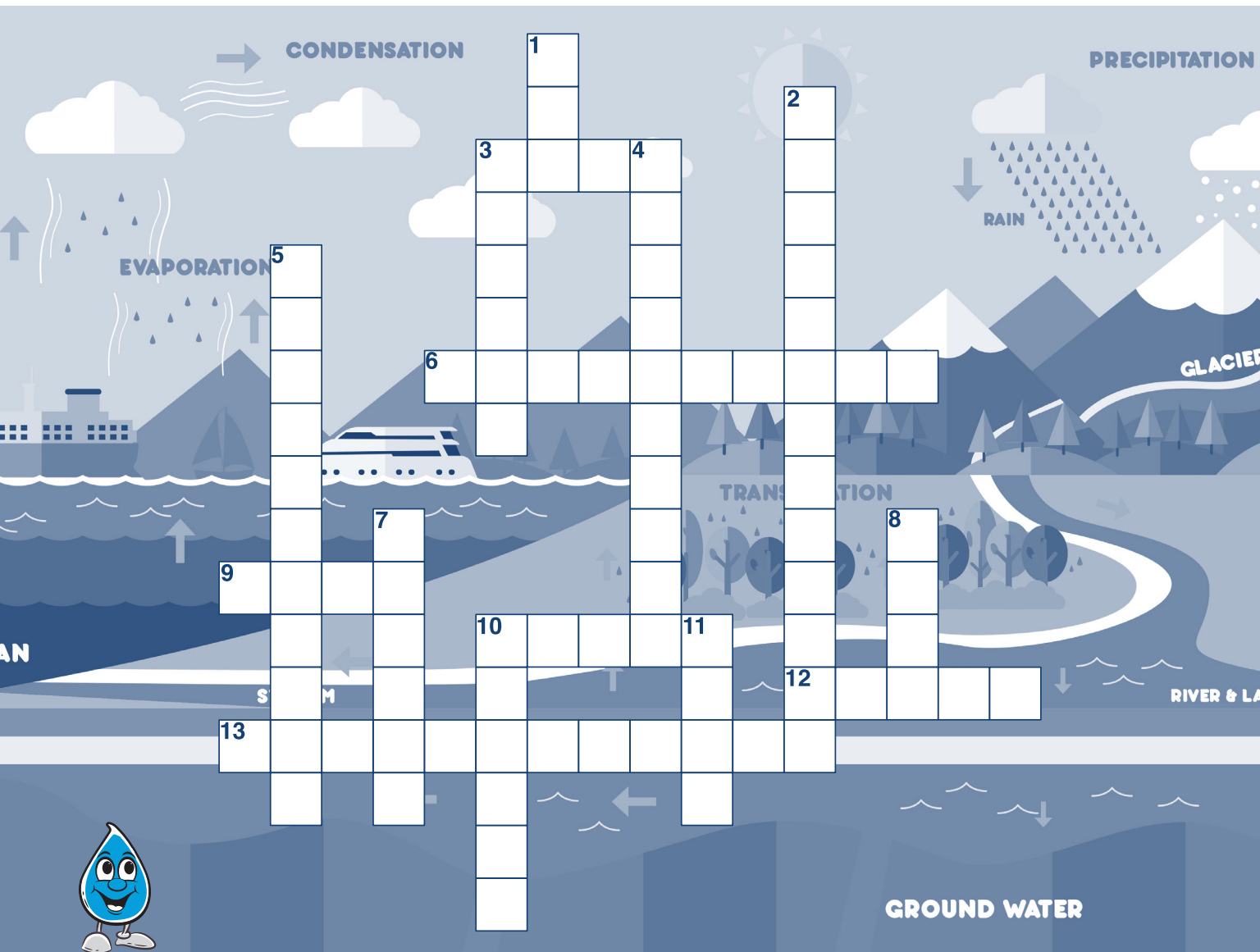
The Meridian Water Division has an opportunity for you. Painting and maintenance of our fire hydrants is an essential task that keeps our community vibrant and provides quick, easy identification for emergency personnel. Would you like an opportunity to volunteer for our fire hydrant painting program?

We would like to thank Cade Guthziet, Zach Jeppson, Isaac Szuch, Spencer Kohler, Lucas Erickson, and Girl Scout Troop 263 of Silver Sage. They painted a total of 217 Hydrants in 2017.

If you would like to participate, contact the Water Division at water@meridiandcity.org.



THE WATER CYCLE



ACROSS

3. Ice crystals that fall from the sky.
6. Water that has been heated to a gas. (2 words)
9. Frozen rain
10. A large body of water that flows across the land.
12. A large body of salt water.
13. The process of changing from water vapor to droplets.

DOWN

1. What provides the energy that drives the water cycle?
2. The process of water droplets or ice crystals falling from the sky.
3. A small body of water that flows across the land.
4. The process of water moving through the world by precipitation, evaporation, and condensation. (2 words)
5. The process of water turning into vapor.
7. These form in the sky when water vapor condenses into water droplets.
8. A large body of fresh water.
10. Water that flows in streams and rivers into the oceans and lakes.
11. Water droplets that fall from the sky.

**Answers on back of booklet.*

BEFORE YOU DIG, DOUBLE CHECK & CALL

TAKE PRECAUTION

Don't pay for a costly mistake that can easily be prevented. Underground power, gas and water lines can cause significant injury and damage if struck. Before you start any type of construction or excavation project on or near your home, call 811 to identify all underground utilities.

This single call will connect you to Idaho's one call underground notification center which in turn will notify all of the utility providers in your area. Upon receiving notice, they will then mark their facilities around your property within 48 hours at no cost to you. You can also submit an on-line locate request at www.digline.com.

Meridian staff completed 8,945 utility locates last year alone!

**ONE CALL...
THAT'S ALL!**



**Know what's below.
Call before you dig.**

► EVER WONDER WHAT THOSE COLORED LINES ON THE GROUND ACTUALLY MEAN?



APWA UNIFORM COLOR CODES



**Electric Power Lines, Cables,
Conduit and Lighting Cables**



**Communications, Alarm or Signal Lines,
Cables or Conduit, Traffic Loops**



**Gas, Oil, Steam, Petroleum,
Gaseous Materials**



Potable Water



**Reclaimed Water,
Irrigation, Slurry Lines**



Sewers and Drain Lines



Outlining Dig Site



Temporary Survey Marks

A large, white, spherical water tower with the word "MERIDIAN" written in bold, black, sans-serif capital letters across its middle. The tower is set against a clear blue sky. In the foreground, there are pink cherry blossom trees.

MERIDIAN

THE POWER OF PUBLIC WORKS

Come Join Us and Celebrate the 10th Annual

CITY OF MERIDIAN PUBLIC WORKS WEEK JUNE 4TH-8TH

www.meridiancity.org/pww

Public Works Week is a nationwide celebration of public works programs and activities. The events highlight what we do behind the scenes to provide our citizens with critical water and sewer services. Join us to learn more about the processes used to maintain the high quality of life we have come to appreciate in Meridian.



JOIN THE FUN

WEDNESDAY, JUNE 6TH

GO WITH THE FLOW FACILITIES TOUR

Time: 5:30 p.m. – 8:30 p.m.

Our chartered bus transports riders along the sequence of our City water operations – from drilling for drinking water, water storage and distribution to wastewater collections and treatment. Step inside our iconic water tower, visit an artesian well, walk down into a lift station, and tour the wastewater plant! **FREE!** Space is limited. Must be age 13 or older to participate. Call 208.898.5500 to reserve your spot!



THURSDAY, JUNE 7TH

PUBLIC WORKS EXPO

Time: 4:00 p.m. – 7:00 p.m.

Location: Meridian City Hall 33 E. Broadway Ave.

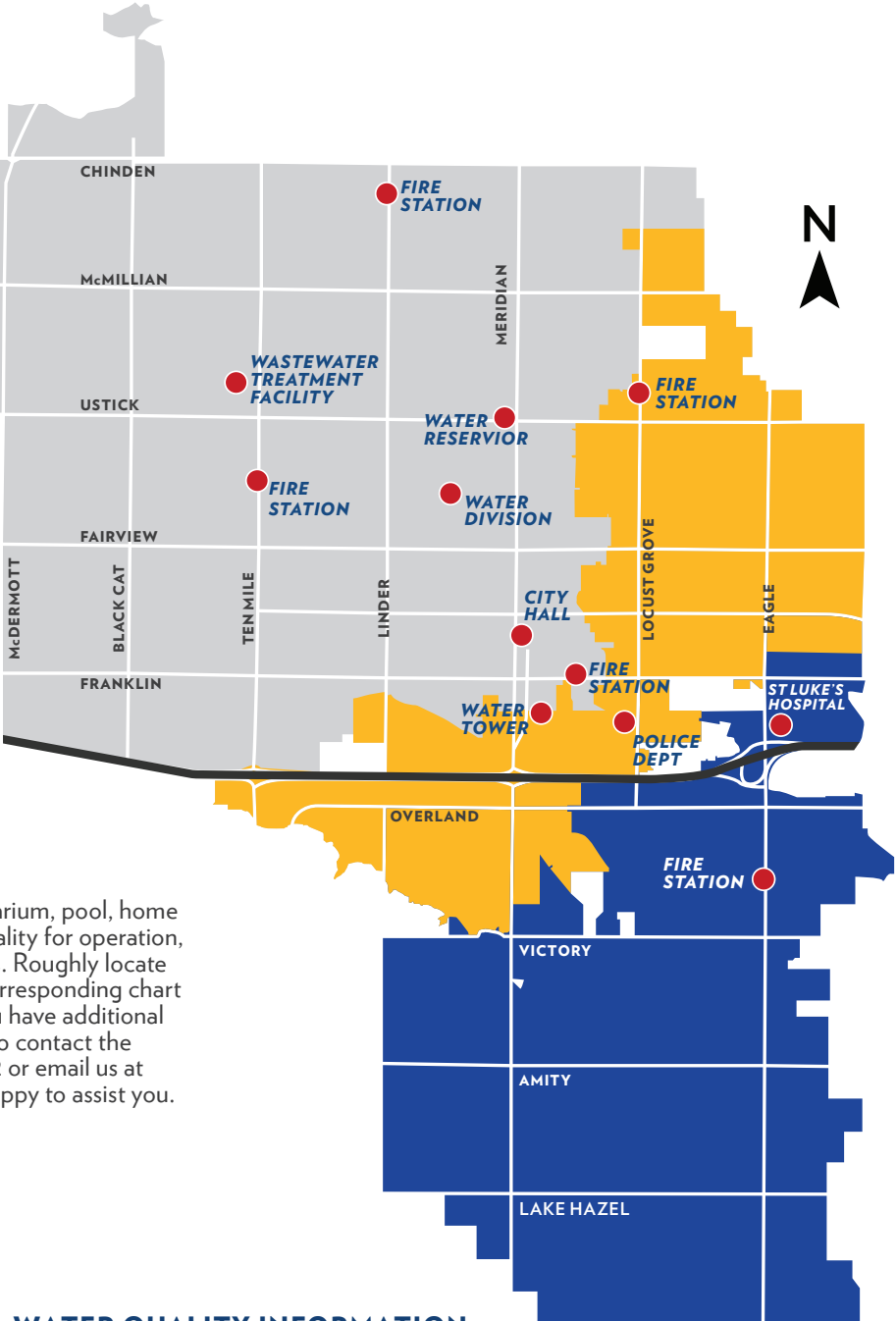
FREE! We'll have interactive displays, free drawings for great prizes, heavy equipment demonstrations, hands-on activities for kids and free popcorn, hot dogs and drinks. Educational and fun for the whole family!



WATER QUALITY IN YOUR NEIGHBORHOOD

WHAT ZONE DO YOU LIVE IN?

If you are installing a water softener, aquarium, pool, home brewing beer, or require certain water quality for operation, please use this chart for your setup needs. Roughly locate where you are on the map and use the corresponding chart to answer your water quality needs. If you have additional water quality questions, please feel free to contact the Meridian Water Division at 208.888.5242 or email us at water@meridiancity.org. We will be happy to assist you.



WATER QUALITY INFORMATION

CONSTITUENT	ZONE 1 & 2	ZONE 3	ZONE 4 & 5
SODIUM	18.73	28.88	80.26
ALKALINITY	96.98	132.00	216.60
CALCIUM	31.23	38.13	42.80
MAGNESIUM	6.04	6.59	8.02
SULFATE	36.63	30.50	63.00
TDS*	182.00	204.00	339.60

ANNUAL FLUSHING PROGRAM

Meridian conducts routine and non-routine flushing continuously throughout the year in an effort to improve water quality and reduce brown water occurrences by removing built up iron and manganese sediments within our water lines.

We send out mail inserts and flushing schedules the month before flushing begins and post updates on Facebook, Twitter and Nextdoor before and throughout the flushing season.

We also send out email notifications of these activities with a flushing map 24 hours prior to work being done. If you would like to be added to our list of contacts, please email us at water@meridiandcity.org or call us at 208.888.5242 and request to be added to our “flushing notice list.”

Our annual flushing events occur during the months of March and April. During these flushing events you may experience water discoloration, or variations in water pressure and encounter water running down the street.

HELPFUL TIPS DURING FLUSHING EVENTS

- Your tap water may temporarily appear red, brown or blackish in color. If this occurs, simply run your cold water faucets in your bathtubs at full stream for a few minutes until the water runs clear.
- To avoid any unwanted sediment build-up in your hot water heater, you should always clear your lines using cold water taps like outside faucets, sinks and tubs.
- During this flushing period, you should check your clothes washers and ice makers for any sediment before using. These sediments are harmless and do not pose a health risk.
- If your faucets seem to be clogged or running slowly, simply remove the screens and rinse out.
- The water pressure inside your home may also fluctuate at times. This is only temporary and regular water pressure will resume once this flushing period is complete.



WATER CONSERVATION

Water conservation is not just an idea that impacts the environment but your wallet as well. Water is a precious and limited resource that cannot be replenished. It is our responsibility to use water wisely.

Idaho has a great arid climate which will support drought tolerant plants - many of which are native to our area. In Idaho, much of our water consumption is used on outdoor watering and landscape use. Reducing green space and exploring a more xeriscape yard could greatly reduce your water bill. These drought resistant plants require much less water to grow, which means more money in your pocket.

HERE'S HOW YOU CAN CONSERVE

Repair dripping faucets.



Dripping faucets can waste up to 2,000 gallons of water each year in the average home.

When washing dishes by hand, do not let the water run. Fill up the sink.



Water your lawn early in the morning or at night to avoid excess evaporation.



Chill your water in the fridge; do not run the tap.



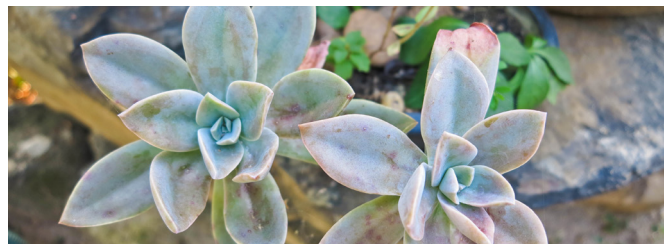
Use a broom to sweep the driveway/patio, instead of using a water hose.



Repair leaking toilets.

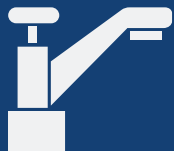


Plant drought-resistant plants.



WHAT HAPPENS WHEN ~~YOUR~~ DONE: PROTECTING WATER QUALITY BEGINS WITH YOU

You may not think about it, but your daily choices make a difference to the pipes in the City of Meridian's sewer system and the water quality of our rivers and streams. Everyone should be mindful of what they flush or pour down drains.



IN THE KITCHEN

Grease sticks to household and sewer pipes. Over time, grease build-up will block the pipe and can result in raw sewage backing up in homes or causing street sewer pipes to overflow into the street creating public health hazards. Follow these five simple steps to keep things running smoothly:

- **DON'T** put produce stickers down the drain.
- **DON'T** put grease, fats, or oil of any type down your drain or garbage disposal.
- **DON'T** put egg shells in your garbage disposal. They are abrasive and can damage machinery.
- **DO** use baskets or strainers in sink drains to catch food scraps and other solids and empty them into the trash or compost them.
- **DO** scrape grease and food scraps from cooking surfaces into a container and put in the trash can or compost them.



IN THE BATHROOM

Think trash not toilets. Flushing the wrong thing down the toilet damages your household plumbing, the environment and the wastewater treatment system. If it isn't from your body or toilet paper, put it in the trash instead of the toilet.

When using "wet wipe" type products, dispose of these in the garbage, not down the toilet.

While the packaging of many "flushable wipes" says that it will disintegrate like toilet paper, that generally is not accurate. These items can cause messy sewage backups into homes, local businesses or the street.

DO NOT FLUSH THE FOLLOWING:

- Baby Wipes and Diapers
- Cleaning Wipes
- Paper Towels
- Rags and Towels
- Cotton Swabs and Cotton Balls
- Feminine Products
- Household Cleaners
- Unused Pharmaceuticals
- Paint, Used Motor Oil, Pesticides
- Aquarium Gravel or Kitty Litter

PROTECT WATER QUALITY BY PROPERLY DISPOSING OF YOUR PRESCRIPTIONS AND OVER-THE-COUNTER MEDICATIONS.

Take them to the Meridian Police Department:
1401 E. Watertower Street
Meridian, ID
Monday-Friday, 8 a.m. to 5 p.m.
Or take them to one of our prescription collection events.



LEAD-FREE WATER

Lead is a naturally occurring element found in small amounts in the Earth's crust. Elevated levels of lead in humans can cause serious health problems, especially for pregnant women and young children. Lead occurrence in drinking water is primarily from materials and components associated with water service lines and home plumbing fixtures. Lead can enter drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content. Meridian's water source wells contain no traces of lead.

Meridian's water infrastructure is relatively new with most construction primarily taking place in the last 25 years. The recent construction materials have much lower contamination risk. Older homes and water systems, constructed prior to the 1986 Reduction of Lead in Drinking Water Act (RLDWA) established by the Environmental Protection Agency (EPA), are more susceptible to higher lead levels as lead was a common material utilized for water systems and home plumbing construction.

MERIDIAN DOES NOT HAVE LEAD IN ITS WATER SOURCES

Meridian proactively samples for and monitors concentrations of lead in our drinking water. Samples are taken regularly at random houses throughout the City constructed during the time frames lead was used in plumbing. Results are shared with homeowners and reported to Idaho Department of Environmental Quality (IDEQ). Looking forward, we will continue to sample and monitor for lead.

Although the City of Meridian is responsible for providing high quality drinking water, it cannot control the variety of materials used in plumbing components. If you reside in a residence where you feel lead plumbing components have been used, minimize your exposure by flushing your tap for 30 seconds to 2 minutes before drinking or using for cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead. You can also visit our website at www.meridiancity.org or contact us by phone at 208.888.5242 or by email at water@meridiancity.org with any questions.

MERIDIAN WATER QUALITY DATA

We routinely monitor for contaminants in your drinking water according to Federal, State, and local standards. The State of Idaho requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are generally stable, not expected to vary from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. These tables show the results of monitoring for the period of January 1st to December 31st, 2017, unless otherwise noted. For more information about this report, or any questions relating to your drinking water, please contact us at water@meridiancity.org.

INORGANIC CONTAMINANTS

CONTAMINANT	VIOLATION Y/N	MCL	MCLG	LOW LEVEL DETECTED	HIGH LEVEL DETECTED	TEST DATE	LIKELY SOURCE OF CONTAMINATION
Arsenic	N	10	N/A	ND	ND	DEC-16	EROSION OF NATURAL DEPOSITS; RUNOFF FROM ORCHARDS
Barium	N	2	2	ND	0.8	DEC-16	EROSION OF NATURAL DEPOSITS
Nitrate (as Nitrogen)	N	10	10	ND	4.4	FEB-17	EROSION OF NATURAL DEPOSITS; RUNOFF FROM FERTILIZER USE

VOLATILE ORGANIC CONTAMINANTS

Xylenes (Total)	N	10	10	ND	0.76	SEP-17	DISCHARGE OF PETROLEUM BASED PRODUCTS (PVC)
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RADIONUCLIDES

CONTAMINANT	VIOLATION Y/N	MCL	MCLG	LOW LEVEL DETECTED	HIGH LEVEL DETECTED	TEST DATE	LIKELY SOURCE OF CONTAMINATION
Gross Alpha	N	15	15	ND	0.031	DEC-16	EROSION OF NATURAL DEPOSITS
Combined Radium	N	5	5	ND	0.79	AUG-16	EROSION OF NATURAL DEPOSITS
Uranium	N	30	30	ND	32	SEP-17	EROSION OF NATURAL DEPOSITS

LEAD AND COPPER

CONTAMINANT	VIOLATION Y/N	90TH PERCENTILE	MCLG	LOW LEVEL DETECTED	SITES ABOVE ACTION LVL	TEST DATE	LIKELY SOURCE OF CONTAMINATION
Lead	N	0	N/A	ND	2	AUG-17	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS
Copper	N	0.08	2	ND	0	AUG-17	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS

DISINFECTANT BY PRODUCTS

CONTAMINANT	VIOLATION Y/N	MCL	MCLG	LOW LEVEL DETECTED	HIGH LEVEL DETECTED	TEST DATE	LIKELY SOURCE OF CONTAMINATION
HHA	N	60	N/A	ND	0.06	MAR-17	BY-PRODUCT OF DRINKING WATER DISINFECTION
THM	N	80	2	ND	0.014	SEP-17	BY-PRODUCT OF DRINKING WATER DISINFECTION
Chlorine	N	4	4	0.22	0.76	OCT-17	WATER ADDITIVE USED TO CONTROL MICROBES

BACTERIA

CONTAMINANT	VIOLATION Y/N	MCL	MCLG	HIGHEST % POSITIVE IN A MONTH	TOTAL # POSITIVE	LIKELY SOURCE OF CONTAMINATION
Total Coliform	N	>5%	0	0.09%	ND	NATURALLY PRESENT IN THE ENVIRONMENT

DEFINITIONS TO HELP UNDERSTAND ABBREVIATIONS USED IN THIS REPORT

(AL) Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

(HAA) Haloacetic Acids: By-products created when disinfectants used to treat water react with organic and inorganic material in source water.

(MCL) Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

(MCLG) Maximum Contaminant Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow a margin of safety.

(THM) Trihalomethanes: Chemical compounds that can be formed when water is disinfected with chlorine.

Primary Standard: Federal drinking water regulations for substances that are health related. Water suppliers must meet all primary drinking water standards.

Secondary Standards: Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.



WATER DIVISION

2235 NW 8th Street
Meridian, ID 83646

Phone: 208.888.5242

Fax: 208.884.1159

water@meridiancity.org

10 WAYS TO ENGAGE WITH THE CITY OF MERIDIAN!

1. Regularly visit the City of Meridian website at www.meridiancity.org.
2. Join Nextdoor or follow us on social media (@MeridianIdaho).
3. Watch weekly Meridian City Council meetings Online, live streamed from the City website.
4. Sign up for our City News e-newsletter! Just click the envelope icon on our website.
5. Connect with Mayor Tammy! Read her blog, send her an email, or follow her on social media www.meridiancity.org/mayortammy.
6. Attend Meridian Town Halls, Coffee with the Mayor, or other City events. Learn more at www.meridiancity.org/events.
7. Volunteer for the City. Contact our Volunteer Coordinator to learn about opportunities: 208.489.0562.
8. Consider applying to serve on a City Board, Commission, Committee, or Task Force. Call 208.888.4433 to inquire about vacancies or to put an application on file.
9. Participate in City sponsored organizations such as the Mayor's Anti-Drug Coalition, the Mayor's Youth Advisory Council or the Faith Ambassador Council.
10. Invite someone from the City to speak to your neighborhood association or other civic group on a topic of interest.

ADDITIONAL CONTACT INFORMATION

MERIDIAN WATER DIVISION & AFTER HOURS EMERGENCY

208.888.5242

www.meridiancity.org/water

MERIDIAN BACKFLOW PREVENTION

208.888.5242

backflow@meridiancity.org

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

208.373.0550

www.deq.idaho.gov

US ENVIRONMENTAL PROTECTION AGENCY (EPA)

www.epa.gov/safewater

PUBLIC WORKS DIRECTOR

Dale Bolthouse

208.898.5500

dbolthouse@meridiancity.org

WATER SUPERINTENDENT

Dennis Teller

208.888.5242

dteller@meridiancity.org

MERIDIAN MAYOR

Tammy de Weerd

208.888.4433

mayortammy@meridiancity.org

COUNCIL MEMBERS

Luke Cavener

Ty Palmer

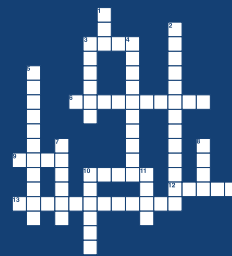
Joe Borton

Genesis Milam

Anne Little Roberts

Treg Bernt

208.888.4433



THE WATER CYCLE

ACROSS:

3. Snow
6. Water Vapor
9. Hail
10. River
12. Ocean
13. Condensation

DOWN:

1. Sun
2. Precipitation
3. Stream
4. Water Cycle
5. Evaporation
7. Clouds
8. Lake
10. Runoff
11. Rain

Find Us On Social Media

