NOVEMBER 2020

CAMPBELL COUNTY CONSERVATION DISTRICT

Water Quality Newsletter

WHY ARE OUR STREAMS "IMPAIRED" ?

Is it because of recreation? Is it industry or agriculture? Is it what you are doing around your own home, in your driveway or in your community? Is it human caused or natural? These are just a few of the questions that were addressed as the Wyoming Department of Environmental Quality (WDEQ) worked with consultants to write TMDL's (Total Maximum Daily Loads) on waterways within Campbell County. These waterways listed as "impaired" by the WDEQ are segments of Donkey and Stonepile Creek, and the Little Powder River. Donkey Creek was listed in 2000 and Stonepile Creek was listed in 2002 both for *E.coli*. Little Powder River was also listed in 2002 for *E.coli*.

What is a TMDL?

A Total Maximum Daily Load (TMDL) is defined as the amount of pollutant a stream can accept and still meet its designated use. TMDL's must be established for each pollutant which is a source of stream impairment. A TMDL study is required by the Clean Water Act when a waterbody is determined to not be meeting its assigned designated uses.

Why should we care?

We all live, work and play in these watersheds and everything we do on land has an effect on water. When the TMDL was written, all sources of pollutants that may be contributing to the impairment were identified. Calculations were then made to determine how much of a pollutant the river can handle and still meet its designated use. From there, each identified source of pollutant is allocated a load, that is how much of the pollutant can go into the water from that particular source. Once the sources and their loads are determined, the need to reduce those pollutants are identified and a plan to do that is prepared. This is where it concerns everyone of us that lives in these watersheds. We know the area, we know what goes on here and we have a lot of knowledge that can help in identifying where these pollutants are coming from.

How you can help!

If you're interested in seeing what you could do to improve water quality, cost-share opportunities are available for installation of Best Management Practices (BMPs) on your property!

For more information visit our website at www.cccdwy.net

Along with cost sharing opportunities, monthly CCCD board meetings and Watershed Steering Committee meetings are held to address and plan efforts to improve water quality.

CAMPBELL COUNTY
CONSERVATION DISTRICT

BOARD OF SUPERVISORS

LINDSAY WOOD	670-0171
Chairman, Rural Member	
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ROBERT BRUG	674-2525
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CRYSTAL KELLEBREW	Education Coordinator

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Hours: 7:30 AM—4:00 PM

Monday—Friday

The USDA is an equal opportunity provider and employer.

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DISTRICT CONSERVATIONIST:

Tim Kellogg

RANGELAND MANAGEMENT SPECIALIST:

Brandon Elkins

PRIVATE LANDS WILDLIFE BIOLOGIST:

Neal Martorelli

ULTIMA ADMINISTRATIVE ASSISTANT:

Shelby Cooper

SCHEDULE OF EVENTS

November 10, 2020	CCCD Board Meeting
November 11, 2020	Veteran's Day Holiday - office closed
November 16-19, 2020	WACD 75th Convention in Torrington
November 26-27, 2020	Thanksgiving Holiday - office closed
December 8, 2020	CCCD Board Meeting
December 25, 2020	Christmas Day - office closed
January 1, 2021	New Years Day - office closed
January 12, 2021	CCCD Board Meeting

2020 Water Quality Sampling is Complete!

Sampling on the Little Powder River began on 5/7/20 and ended on 9/21/20. During that time 45 samples were taken.

Sampling on Donkey Creek began on 5/11/20 and ended on 9/28/20. During that time 73 samples were taken.

What is a Watershed and How Does it Impact Campbell County?

If you have been a subscriber to the CCCD newsletter you have probably seen us refer to watersheds and the work the district is doing within these areas. You probably have heard that we have impaired watersheds or streams that have been listed as impaired by Wyoming Department of Environmental Quality. But have you ever read these articles and thought, exactly what is a watershed and how does it impact my life in Campbell County?

Honestly most people don't really know what a watershed is or how it impacts their lives and the environment. Campbell County watersheds do play a critical role in where water ends up, the condition of the water when it gets there and areas of flooding. Healthy watersheds can help to slow water down, improve water quality, improve soils, affect soil moisture, produce a myriad of plants and support wildlife.

The function of a watershed can be affected overtime by many factors both environmental and human caused. The activities within a watershed, both urban and rural, can severely change the watersheds efficacy and result in a less functional system, but first....

What is a watershed?

There are many ways people describe a watershed, but probably one of the easier ways of visualizing a watershed is to think of a kitchen sink. The edges of the watershed are like the outer edges of the sink. They are the highest points in the watershed and any water that hits that outer edge will go down the sides of the sink. This highest point in a watershed is often referred to as the headwaters. The headwaters then drain to the lowest point, or basin. The watershed also includes all of the land within the watershed border, the water runs over as it flows into rivers, streams, ponds, wetlands and other bodies of water.

When we look at this using our local watersheds, we can say that Campbell County is the headwaters of the Upper Belle Fourche Watershed. Its main streams (the Belle Fourche River, Donkey Creek and Stonepile Creek) start in Campbell County. They flow towards the lowest point in the watershed flowing through ponds, fabricated wetlands like the Gillette Fishing Lake, and reservoirs like Keyhole. All the land within this area has a direct affect on the quality of the water as it flows downstream.

How does watersheds and watershed management affect flooding?

If you have been in Campbell County for a while you probably know when flooding or high-water conditions typically occur. Our water levels are typically highest during the spring and after heavy rain fall. The high levels in the spring are due to the snow melting as temperatures increase. We also see additional water, that is frozen in the soil, melt and find its way to streams. We often see this during the summer months when our watersheds receive heavy thunderstorms. These events typically affect an isolated area within the watershed. In both scenarios we see the rivers raise and often jump their banks. But it isn't just the amount of water that is added to the system, it is also human activity within the system that has affected the way our streams act.

When we look at the human activity within the Donkey Creek Watershed, we can start to see how humans have played a major role in watershed function. As the urban area expanded over time wetlands were drained, filled in and built up. Wetlands act as buffers to catch runoff from the landscape and slow it down before it enters streams, so without many of these the water flows over the landscape and directly into streams. This adds volume and as a result, speed to the water moving through the watershed.

Another major affect human influence has is the creation of "impervious surfaces". As areas transition from rural to urban, infrastructure increases to support increased population and use. This includes paving roads, creating sidewalks, bringing in large stores with parking lots, creating cement structures for streams to pass through the area, and all of these decrease the opportunity for water to absorb into the soil. Although some of these are unavoidable, every hard surface the water hits makes it move quicker and gives it less time to be cleaned before it makes its way to our streams.

How can we improve the function of our watersheds?

To answer this, we must first determine what type of area we are in, rural or urban, and what the major influences are.

For example, if we are in a rural setting with agricultural influences, we might suggest steps to improve soil health such as cover-cropping, no tillage, and ways to improve nutrient management. In Campbell County our most active participants in working to improve our watersheds are our ranchers. They work with the Conservation District and Natural Resources Conservation Service to fence off riparian areas, better utilize areas away from surface water and implement improved cropping techniques.

In the urban settings the focus is placed more on increasing waters ability to infiltrate into the soil. This can be done by replacing sidewalks and parking lots with permeable pavers that allow water to soak into the soil. Installation of rain gardens (a concave patch of native plants that catch water and allow it to soak in) which can help buffer areas while adding an eye appealing landscape is another option. If we all work together we can improve our communities watershed function.

No matter the area or the size of the project when the community works together, we can increase the resiliency of our landscape. By taking small steps we can all do our part to help our local watersheds do their jobs and benefit all of us.

HOW BEAVER DAMS COULD ACTUALLY HELP OUR STREAMS

Starting with fur trapping across the west in the early 1800's, the mass removal of beavers from western landscapes led to unexpected effects on a variety of topics related to stream and wetland function. It is a common misconception that streams are meant to have a single channel with limited obstructions. Our western landscapes operate best when streams meander, pool, and create bars. Fish and other aquatic invertebrate thrive in diverse environments which are often provided when things like beaver or large woody debris dams are in place. Due to the removal of instream structures, streams have begun to degrade and become more channelized. This has led to faster flowing streams and bank erosion, effectively reducing the amount of areas for aquatic species to rest. This also limits wetland development and groundwater recharge, reduces the amount of riparian vegetation (such as cottonwoods and willows), and disconnects streams from their floodplains. All of which can lead to a long list of potential water quality issues.

This is where Beaver Dams come into play. Beaver Dam Analog's, or BDA's, are a relatively new restoration tool that utilizes the natural function of real beaver dams, to adds complexity to arid environments. By going into the watersheds where beavers once dominated, crews can build and mimic the instream structures which once scattered the landscape. This often forces the stream to pool water upstream, reconnecting it with the floodplain and initiating wetland development. BDA's have been shown to decrease pollutant concentrations, raise the water table, and reestablish aquatic species. One of the best things about building BDA's, is they take relatively little time and money compared to more complicated practices, such as designing an engineered channel. BDA's can be installed in a single day, and through utilizing materials already onsite, cost a tenth of other restoration practices.

The Campbell County Conservation District has cost-share opportunities to improve the water quality of Little Powder River and Donkey Creek watersheds and are looking for involved landowners willing to work with CCCD on projects similar to these. If you or someone you know is looking for the opportunity to make an impact on water quality related issues in the county, please contact the CCCD for more information.

DID YOU KNOW??

The Gillette Fishing Lake (GFL) was listed on the 1996 Wyoming's Impaired Waters List as impaired due to high levels of sediment and phosphate.

Beginning in 2008, the CCCD initiated a Storm Drain Sticker Program in partnership with the City of Gillette. Approximately half of the city storm drains collect water in the 27,000 acre area surrounding Gillette and drain into Gillette Fishing Lake (GFL). When it rains, storm water flows over driveways, lawns, and parking lots on its way to the nearest entrance into the storm sewer system. Runoff carries motor oil, gas, pet waste, pesticides, fertilizer, paints and detergents straight into the GFL.

The Summer of 2010, the City added floating islands to GFL as part of an effort to clean up the lake and improve habitat for wildlife. The islands act like a sponge, taking up pollutants through the roots of the plants installed on the island. In 2016, the islands were refurbished and anchored.

In 2012, the City developed a wetland complex and series of sedimentation ponds at the inlet to the lake to trap sediment before reaching the lake.

To date, over 3000 storm drain stickers have been applied by CCCD. Each year, the CCCD applies storm drain stickers to remind people that only water should enter the storm drains. By spreading the word that storm drains are not trash cans, you can keep GFL clean!

CCCD PARTNERS WITH THE CITY OF GILLETTE AND CAMPBELL COUNTY TO REDUCE E.COLI IN DONKEY CREEK

The Campbell County Conservation District has been working to reduce *E. coli* in the Donkey Creek watershed since 2002. During these past 18 years the district has actively monitored the watershed and work with partners and landowners to implement best management practices.

During the districts most recent project, best management practices were a major focus. Based on monitoring information gathered by the CCCD canine sources were identified as a contributor to the *E. coli* entering the surface water. As a result of this new information, the CCCD partner with the City of Gillette and Campbell County Parks and Recreation Department to install pet waste disposal stations throughout the area. These stations included signage, pet waste bag dispensers, and some even had trashcans. In total the City of Gillette installed 68 stations in 27 parks and Campbell County Parks and Recreation Department installed 24 stations in 7 county parks. Please remember to do your part and clean up after pets!

PARTNERSHIP CREATES A RAIN GARDEN

As our communities grow and develop, stormwater runoff becomes a problem. Impervious surfaces like parking lots, streets, sidewalks and buildings can accumulate pollutants. The runoff collects these pollutants and can remain unfiltered as it flows to streams and reservoirs. It then becomes our drinking water and makes up our recreation areas. The runoff can also increase flooding potential. One way to combat this problem is the creation of rain gardens. Rain gardens in critical locations will collect and filter stormwater runoff through natural processes.

In late 2017, the idea to create a rain garden near the Gillette College Technical Education Center's parking lot began. One inch of rainfall on the 3.1-acre parking lot is equal to 82,152 gallons of water. The water runoff then collects contaminants and flows into the Donkey Creek watershed. Those contaminants include not only chemicals from the parking lot, but also *E. Coli* strains likely from animals that walk along or feed in that area such as dogs, geese, and others.

"The water quality of this watershed has been impaired for several years," said Jennifer Hart, district manager for the Campbell Country Conservation District. "Unfortunately, it's not a point source pollution where we can just plug up a pipe."

The Donkey Creek watershed is a source for the Gillette Fishing Lake in Dalbey Memorial Park which is heavily utilized by the community. The water continues to flow downstream to Keyhole Reservoir which is also a popular recreational site.

Mark Andersen, the facilities director at the college, said "The Campbell County Master Gardeners approached the college to talk about what a rain garden is and how it can benefit the community, the watershed, and the college. We had a good location along 4-J road that would be public for people to see so they can learn and understand what a rain garden is as well."

The master gardeners and Gillette College then partnered with the conservation district to create a plan and identify funding sources for the project.

"We were able to fund the project with assistance from Clean Water Act Section 319 Funds from Wyoming Department of Environmental Quality, as well as water quality funding from the Wyoming Department of Agriculture," said Hart.

The college, as well as other volunteers, contributed a nearly 40% match in funding. The total cost of the project was about $42.2k.

"With the help of engineering support through the Natural Resources Conservation Service's Conservation Technical Assistance, an agreement for the project was created in July 2018," said Hart.

NRCS delivers conservation technical assistance through its voluntary Conservation Technical Assistance Program. CTA is available to any group or individual interested in conserving natural resources and sustaining agricultural production.

"The challenge with this project was bringing our agriculture expertise into an urban environment," said Chris Campton, a civil engineering technician with NRCS. "Since this would be a very public and visible project, we wanted to make sure it was aesthetically pleasing while still meeting the water quality requirements set forth in the grant. Based on these conditions, we decided a filtration system, such as a rain garden, was the best option."

Once the plans were approved, the rain garden construction began in July 2018.

"We chose materials and vegetation that would filter and detoxify the contaminated water as it ran through the rain garden," said Campton. "We had a lot of support from the college, the conservation district, and others. There is a maintenance aspect of this project as well. As the years go on, the rain garden will evolve as plants and materials are switched out to maintain the necessary filtration and detoxifying qualities."

Local support for the project was critical to its construction.

"We had a lot of community members volunteer to help install the rocks, plants, and trees to create this rain garden," said Andersen. "As we went through the process, we learned quite a bit of how much contaminated water actually comes off of our campus and flows into Donkey Creek."

Educating the community about the benefits of a rain garden was another goal of this project.

"Any opportunity we have to provide education on how the community can do its part is always beneficial," said Hart.

With the help of numerous volunteers, the project was completed in the summer of 2019.

"Not only did we end up with a rain garden, but we ended up with a lot of education on what we can do to better prevent the contaminants from getting into Donkey Creek," said Andersen.

The project also included the installation of interpretive signs that provide further education about the project. These signs explain the purpose of a rain garden and how it is made.

"Rain gardens such as these are beneficial to communities in many ways," said Hart. "As more of these rain gardens are created, the greater impact they will have on improving the quality of water supplied to our communities. It's going to take a lot of these smaller projects to really make an impact on the watershed."

Visit the rain garden at the Gillette College Technical Education Center located at 3251 S 4-J Rd, Gillette, WY 82718.

For more information on NRCS Conservation Technical Assistance, visit our website at www.nrcs.usda.gov or contact your local NRCS service center.

2021 CCCD Seedling Tree Order Form

Conditions of Sale

1. This nursery stock must be used for conservation purposes only.
2. No plant purchased from the CCCD may be resold as a living plant.
3. Bareroot stock is available in multiples of 25 per species only.
4. Tube stock is available in multiples of 30 per species only.
5. No guarantee of survival.
6. **Payment must accompany the order**.

TREES WILL BE DELIVERED TO GILLETTE THE FIRST WEEK IN MAY. *We will contact you prior to delivery.*

Order No. _____

I have read and agree with the above *"Conditions of Sale"*.

_____
Signature Date

_____
Name (please print) Mailing Address

_____ Daytime phone: _____
City State Zip Code Evening phone: _____

_____ E-mail address: _____
Acres of ownership County

How did you learn of the CCCD tree sale? ☐ CCCD website ☐ CCCD facebook page
☐ CCCD Newsletter ☐ Other_____

Send order form and check made payable to:
Any questions call-
(307) 682-1824

Campbell County Conservation District (CCCD)
601 4J Court, Suite D
Gillette, WY 82716

SHRUBS

CARAGANA: medium to tall, does well on poor soils, excellent drought resistance, rapid growth rate
CHOKECHERRY: tall shrub, can be poisonous to livestock, rapid growth rate, prefers well drained soil
COYOTE WILLOW: suckers, rapid growth rate on moist soil
LILAC: excellent cold hardiness, rapid growth rate
NANKING CHERRY: rapid growth rate, Fruit edible
RED-OSIER DOGWOOD: small to medium shrub, not suited for dense clays
SILVER BUFFALOBERRY: native, good drought resistance
THREE-LEAF SUMAC:
WAX CURRANT: very good drought resistance, rapid growth rate, edible fruit, native
WOODS ROSE: Low shrub; rapid growth rate, suckers

DECIDUOUS TREES

BUR OAK: excellent drought resistance, can live more than 200 years
COTTONWOOD, HYBRID: excellent cold hardiness, rapid growth rate, prefers well drained soil
HONEYLOCUST: good drought resistance, rapid growth

CONIFER TREES

AUSTRIAN PINE: tall, excellent drought resistance
BLACK HILLS SPRUCE: moderate drought resistance, hardy to cold temperatures
COLORADO BLUE SPRUCE: tall, slow growth rate
EASTERN REDCEDAR: medium height, drought tolerant, very adaptable to site conditions, red-brown color in winter
PONDEROSA PINE: tall, rapid growth rate
ROCKY MOUNTAIN JUNIPER: excellent drought resistance, alkaline tolerant

2021 CCCD Seedling Tree Order Form

ALL PAYMENTS MUST ACCOMPANY ORDER FORM. INVENTORY CHANGES DAILY!!!
LAST DAY TO ORDER IS APRIL 1, 2021. TREES WILL BE DELIVERED IN MAY.

Bareroot Trees—lots of 25 only
Height varies by species, all bareroot trees will be 5 inches or taller

Species	# Lots	Cost/25	Total
01 Caragana		$31.00	
04 Chokecherry		$31.00	
05 Lilac		$31.00	
09 Nanking Cherry		$31.00	
11 Woods Rose		$31.00	
12 Silver Buffaloberry		$31.00	
19 Wax Currant		$31.00	
22 Hybrid Cottonwood		$31.00	
37 Honeylocust		$31.00	

Method of Payment (CCCD use only)

Check #			
Cash			

Large Tube Trees—lots of 30 only
Height varies by species, all large tube trees will be 6 inches or taller

Species	# Lots	Cost/30	Total
200 Austrian Pine		$95.00	
202 Colorado Blue Spruce		$95.00	
205 Ponderosa Pine		$95.00	
206 Eastern Red Cedar		$95.00	
210 Rocky Mtn. Juniper		$95.00	
216 Silver Buffaloberry		$95.00	
217 Black Hills Spruce		$95.00	
237 Three-Leaf Sumac		$95.00	
243 Wood's Rose		$95.00	

XL Potted—individual 1 gallon only
Minimum 12" height

402 Colorado Blue Spruce**		$13.00	
405 Ponderosa Pine**		$13.00	
410 Rocky Mtn. Juniper**		$13.00	
414 Chokecherry**		$13.00	
426 Common Lilac**		$13.00	
427 Hackberry**		$13.00	
453 Bur Oak**		$13.00	
**** - LOW INVENTORY - ORDER ASAP!!!**			
Sunbelt Weed Barrier ***Last day to order is March 1st***			
4' x 300'		$75.00	
6' x 300'		$95.00	

Total Before Tax	$
Sales Tax 5%	$
Total Amount Due	$

Non-Point Source of Impairment

The term "nonpoint source" means any source of water pollution that does not meet the legal definition of "point source". "Point sources" include things like pipes, ditches, channels, tunnels, conduits, and wells from which pollutants are or may be discharged. Nonpoint source pollution, by contrast, is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Nonpoint source pollution can include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas
- Oil, grease and toxic chemicals from urban runoff and energy production
- Sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks
- Salt from irrigation practices and acid drainage from abandoned mines
- Bacteria and nutrients from livestock, pet wastes and faulty septic systems

The impaired creeks, rivers and lakes in Campbell County are a direct result of nonpoint source pollution. Donkey Creek, Stonepile Creek and the Little Powder River are impaired for *E. coli*. The Gillette Fishing Lake is impaired for sediment and phosphorus.

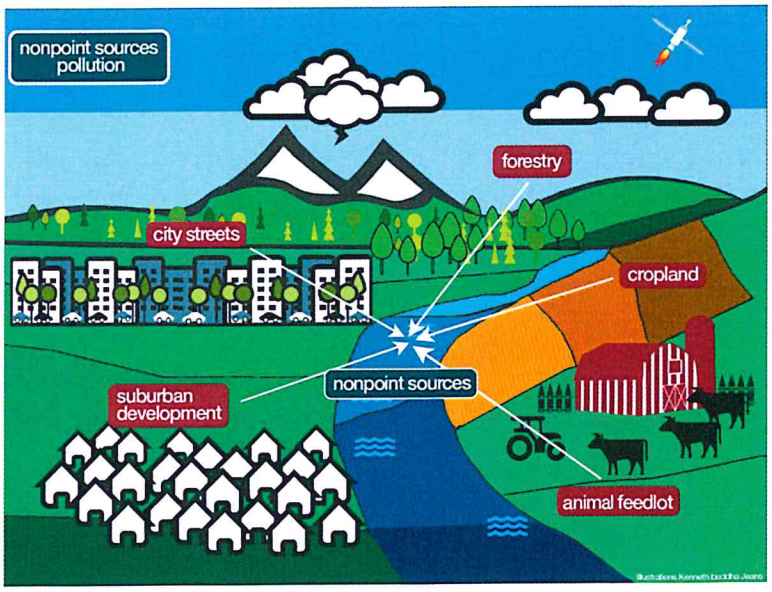
E.coli

Nonpoint sources of pathogenic bacteria such as Escherichia coli (*E.coli*) commonly include faulty or inadequate septic systems, livestock operations, pet waste, and wildlife. Exposure to elevated levels of pathogenic bacteria can be a public health safety concern if contaminated water was accidentally ingested during recreation uses of the water body.

Sediment

Eroding stream banks and surface runoff over bare land contribute sediment to Wyoming's waters. Human land-disturbing activities that can contribute to erosion and sediment transport include: Crop production, construction roads, overgrazing by livestock or wildlife, timber harvesting, urban development, and mining.

Sediment loading increases turbidity which limits the amount of sunlight reaching aquatic plants and also affects fish spawning grounds and macroinvertebrate communities. In addition, sediment often transports other pollutants, such as phosphorus, nitrogen, pathogens, and heavy metals, which can attach to the sediment particles.



WHAT HAS CCCD BEEN UP TO?

AUGUST

- August 3, staff water sampled on Donkey Creek.
- August 4, all staff attended a staff meeting by teleconference.
- August 4, Jennifer attended the WY Board of Agriculture Meeting.
- August 10, staff water sampled on Little Powder River.
- August 11, CCCD Board Meeting, all staff attended.
- August 11, Jennifer and Crystal presented during the Resource Policy Group Teleconference Meeting.
- August 13, staff water sampled on Donkey Creek.
- August 18, Jennifer participated in the NRCS State Technical Advisory Committee teleconference.
- August 19, Jennifer traveled to Rapid City to attend the National Forest Advisory Board tour.
- August 20, staff water sampled on Little Powder River.
- August 24, staff water sampled on Donkey Creek.
- August 28, Crystal presented water quality education activities for the students at John Paul II at Gillette Fishing Lake.
- August 31, staff water sampled on Little Powder River.

SEPTEMBER

- September 3, staff water sampled on Donkey Creek.
- September 7, office closed for Labor Day.
- September 8, CCCD Board Meeting, all staff attended.
- September 9, Crystal applied storm drain stickers.
- September 10, staff water sampled on Little Powder River.
- September 11, Crystal attended PLT Steering Committee meeting in Casper, WY.
- September 14, staff water sampled on Donkey Creek.
- September 16, Jennifer attended NFAB meeting.
- September 21, staff water sampled on Little Powder River.
- September 24, WACD Area I meeting in Buffalo, WY. Lindsay Wood and staff attended.
- September 25, Jennifer & NRCS finished Bay Horse TSI layout.
- September 28, staff water sampled on Donkey Creek.

OCTOBER

- October 5, Jennifer & NRCS monitored solarization study on the Spring Creek unit.
- October 6, Crystal applied storm drain stickers.
- October 8, Crystal applied storm drain stickers.
- October 9, Crystal and Jennifer applied storm drain stickers.
- October 12, office closed for Columbus Day.
- October 13, CCCD Board Meeting, all staff attended.

Information for Harmful Cyanobacterial Blooms in Wyoming Waters-Keith Guille WDEQ

The Wyoming Department of Environmental Quality (WDEQ), the Wyoming Department of Health (WDH) and the Wyoming Livestock Board (WLB) are currently experiencing an increased number of inquiries regarding harmful cyanobacterial blooms (HCBs) in Wyoming waters.

HCBs typically occur in still or slow-moving water as temperatures increase during the summer. They are episodic and can last for a few hours or a number of months.

Cyanobacteria, also known as blue-green algae, can form blooms that produce toxins and other irritants that pose a risk to human, pet and livestock health. WDH issues a recreational use advisory for publicly accessible waterbodies once WDEQ determines that harmful levels of cyanobacteria and/or toxins are present in the water.

WDEQ, WDH, and WLB are reminding the public to check on current recreational use advisories by visiting WyoHCBs.org.

Suspected HCBs can be reported to WDEQ by calling the Report a Spill hotline at (307) 777-7501 or submitting a complaint online at WyoSpills.org. At this time, WDEQ is only able to investigate and sample waterbodies that are accessible to the public. Private landowners who need to test for HCBs are encouraged to review Wyoming's HCB Action Plan for more information on simple tests and analytical services.

If an HCB is present, the WDH and WLB recommend the following:

- Avoid contact with water in the vicinity of the bloom, especially in areas where cyanobacteria are dense and form scum.
- Do not ingest water from the bloom. Boiling, filtration and/or other treatments will not remove toxins.
- Rinse fish with clean water and eat only the fillet portion.
- Avoid water spray from the bloom.
- Do not allow pets or livestock to drink water near the bloom, eat bloom material or lick fur after contact.
- If people, pets or livestock come into contact with a bloom, rinse off with clean water as soon as possible.
- Seek medical attention or a veterinarian if a person or animal is experiencing adverse health effects after exposure to a cyanobacterial bloom. Young children, pregnant women, people with weak immune systems and animals are especially at risk. Questions regarding general health risks and symptoms related to a cyanobacterial bloom can be referred to Dr. Karl Musgrave, State Public Health Veterinarian and Environmental Health Epidemiologist with WDH at 307-777-5825. More health information is also available at https://www.cdc.gov/habs/.

For additional information on HCBs in Wyoming and to sign up for advisory updates, please visit WyoHCBs.org.

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CAMPBELL COUNTY
CONSERVATION DISTRICT

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NP MKT ML
PERMIT NO. 70
Gillette, WY 82716

RETURN SERVICE REQUESTED