

An illustration shows the concept for British environmental artist Chris Drury's addition to Sculpture in the Wild planned for this year.

2016 Sculpture in the Wild Artist pays Lincoln a visit

Roger Dey
BVD Editor

Whirlpools of stone and log, chambers of heavy rock or delicate branches, designs in sand, grass and snow; all are hallmarks of British environmental artist Chris Drury, who creates unique works of art, both in the environment and in galleries, that aren't reliant on a specific medium.

Drury, the 2016 Blackfoot Pathways artist-in-

residence, is bringing his style to Lincoln this fall. Between Sept 12 and Oct. 1, he will create his "Rocky Mountain Whirlpool" at Sculpture in the Wild.

Last month, Drury spent about a week in Lincoln for a site visit to the valley and to Sculpture in the Wild. Although he's spent time in the western US before, he said it was his first visit to Montana, which he called

See DRURY Pg. 6

Warm water prompts "Hoot-Owl" fishing restrictions

Montana FWP
Press Release

Montana Fish, Wildlife and Parks will institute "hoot-owl" fishing restrictions on many western Montana rivers and streams beginning Friday, July 29, due to warm and rising water temperatures.

The restrictions will close fishing daily from 2 p.m. to midnight until conditions improve. "Hoot owl" restrictions apply to the following stretches of water in west-central Montana, effective Friday:

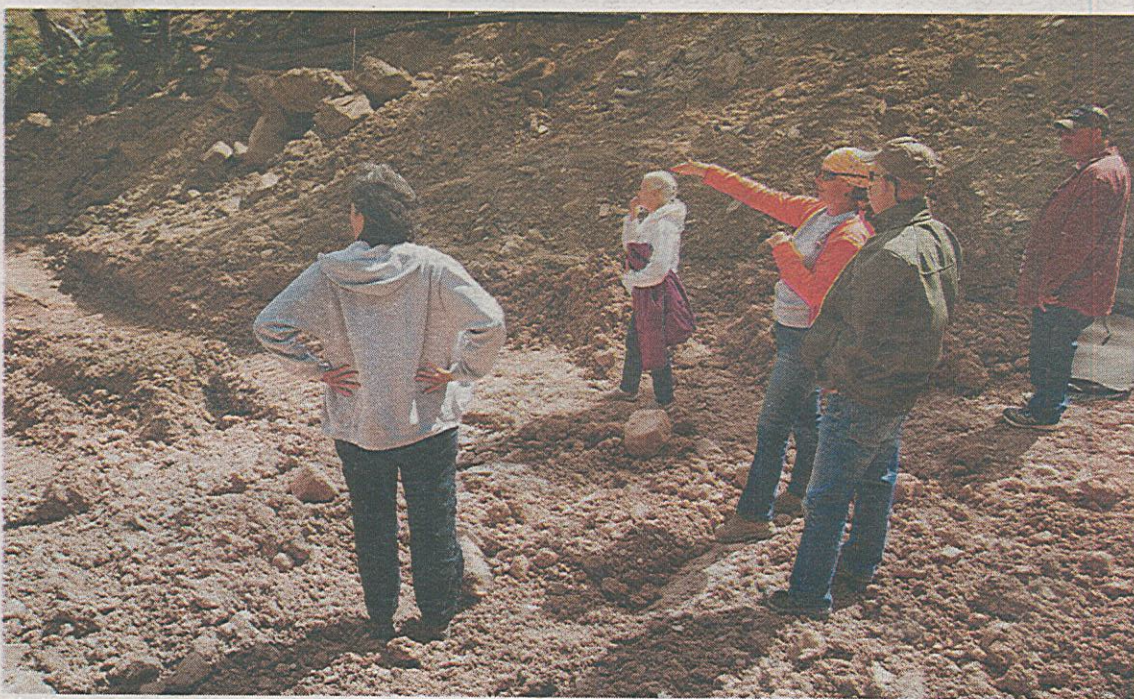
- **Blackfoot:** Entire length
- **Blackfoot tributaries:** North Fork and Copper, Monture and Morrell Creeks
- **Bitterroot:** Tucker Crossing, downstream to confluence with Clark Fork (~47 miles)
- **Upper Clark Fork:** From headwaters where Silver Bow and Warm Springs Creeks join to Rock

- **Creek (~100 miles)**
 - **Silver Bow Creek:** From the confluence with Blacktail Creek to its mouth and confluence with Warm Springs Creek.

"Limiting fishing to the cooler morning hours is very important to reducing stress on fish right now, especially with a weather forecast that continues to be hot and dry," said Pat Saffel, FWP Fisheries Manager in Missoula.

Saffel says that it is a good idea to limit fishing to the coolest hours of the day, even in stretches that are not under restriction, when possible. FWP will continue to monitor temperature, flows and fish mortality on rivers and streams and reevaluate the need for additional restrictions, as early as next week.

For up-to-date information on restrictions related to drought, visit fwp.mt.gov/news/restrictions/.



Shellie Haaland points out the location of the old 200-level adit of the Mike Horse drainage to Jim Robinson during a July 23 tour.

With Mike Horse Dam removed UBMC clean up and restoration moves ahead

Story/photos by Roger Dey
BVD Editor

Now in its third year, cleanup work at the Upper Blackfoot Mining Complex continues to focus on the upper drainages of the headwaters of the Blackfoot River.

During the first two years, efforts were centered largely on the Bear Trap Creek drainage, which was home to the Mike Horse dam and mine waste impoundment that was the symbol of the contaminated headwaters area. This year much of the focus returns to the Mike Horse drainage itself, the location of the mine that produced the waste.

The high mineralization of the Mike Horse drainage and decades of extensive subsurface mining make it in many ways a more complicated area to clean up and reclaim.

"It's shattered bedrock, very porous and you'd have a lot of the rain that would come in and then when water came through, having excavated as much as they did..." Shellie Haaland, the Montana Department of Environmental Quality construction manager said during a July 23 tour of the area. She joked that, much like the circles of Hell in Dante's 'Inferno,' the Mike Horse Mine has nine levels of excavation.

According to Haaland,

the original 2014-15 cleanup contract called for the removal of an old repository built near the mine's 300 level adit in 1995 and other material in Mike Horse drainage, as well as the dam and impoundment in Bear Trap. The discovery of an undocumented two-inch "mystery pipe" during removal of the old repository in 2014 changed that.

"We've got no documentation of it anywhere in our records," Haaland said during a July 23 tour of the area. "We couldn't find it anywhere. We asked people who were around at the time if they knew about it, nobody did."

The pipe, which discharges contaminated water from an unknown source, ran under both the old repository and a pretreatment pond nearby. Finding the source of the pipe and the contaminated water is one of the priorities this year.

"We don't know where and we don't know what it was capturing. It certainly wasn't capturing everything because it was leaking around it as well," Haaland said.

The discovery of the mystery pipe set off a chain reaction within the cleanup project. Not only did it temporarily shift the main effort to the Bear Trap, it justified removal of the pretreatment pond. That meant a

loss of storage capacity for the water treatment plant and the need for additional infrastructure work there, including construction of a new pond and replacement of piping that ran down the Mike Horse valley beneath the excavation.

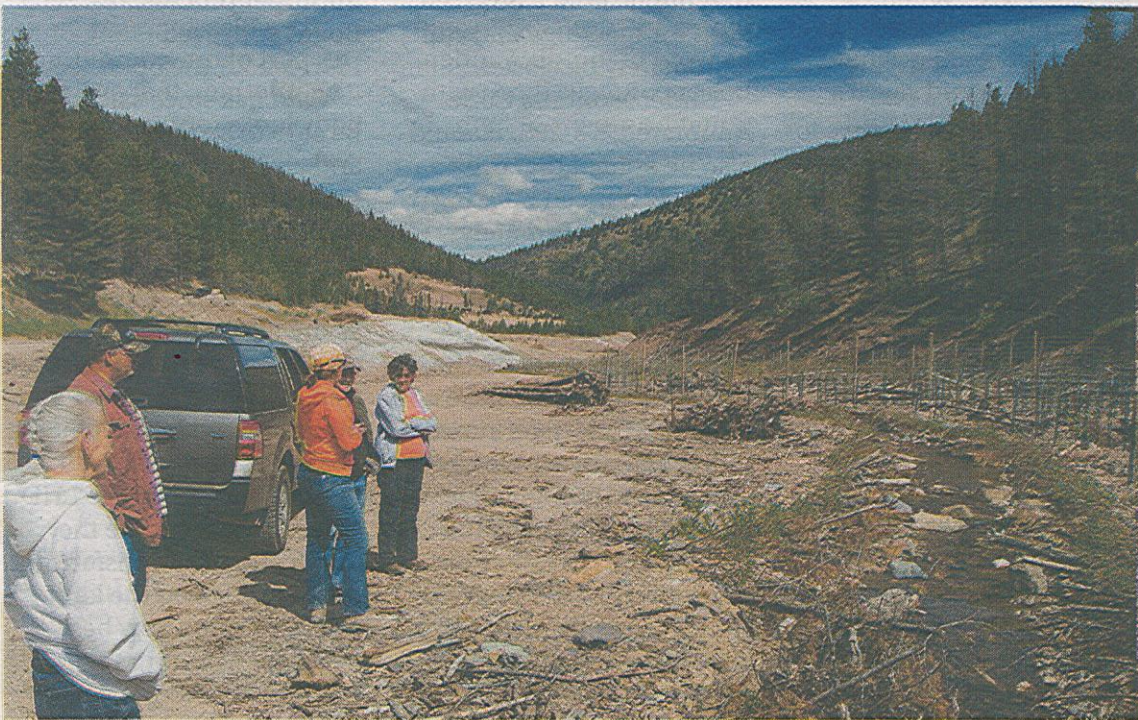
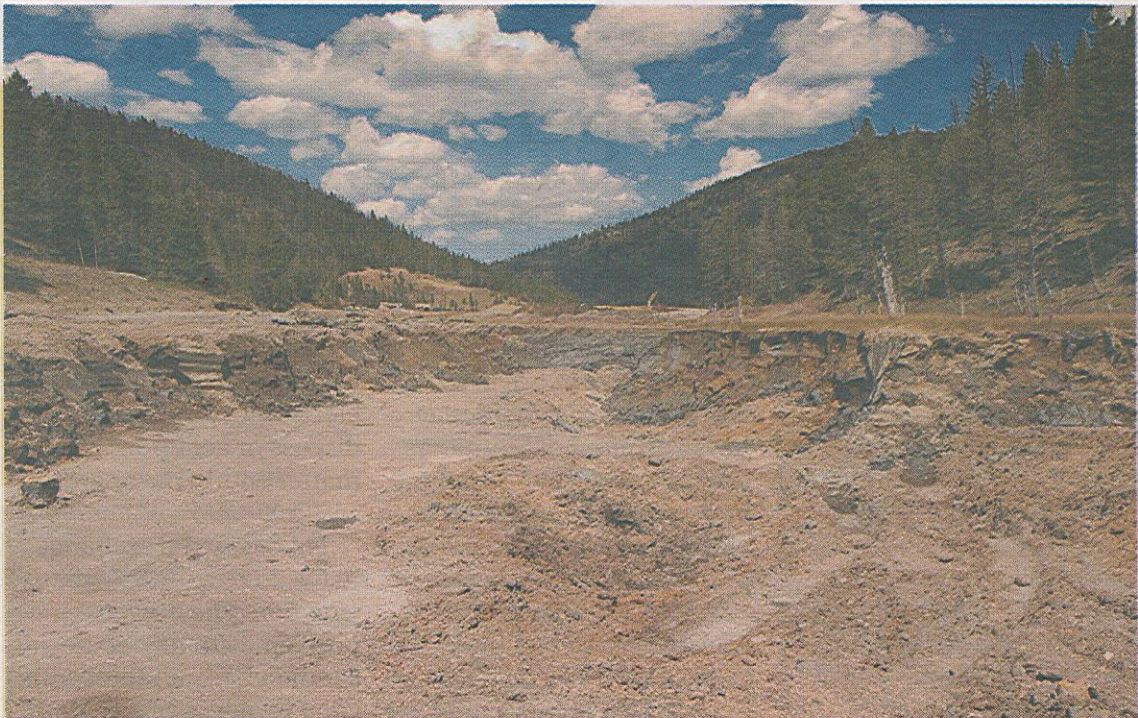
"So far this year the pretreatment pond and some of the mine waste within the Mike Horse valley has been removed, and the ditch, piping, and some additional tailings have been removed from Bear Trap Creek," Haaland explained in a follow up e-mail to the BVD. "The goal this year is to remove all the remaining waste in both drainages and reconnect the two streams that form the headwaters of the Blackfoot River."

In the end though, Haaland said the seep capture systems will collect less freshwater which should allow the treatment plant perform more efficiently and ultimately lead to decreased operating costs.

In the Mike Horse drainage above the 'Mystery pipe,' cleanup and restoration efforts have focused on creating a clean watercourse for Mike Horse Creek.

Run off had added to the contamination problem in the narrow draw, due to over excavation during past reclamation efforts that had

See MIKE HORSE Pg. 6



A photo of the restoration work on Bear Trap Creek during a July 23 tour this year (above) shows the progress made since work began there in 2014 (top). A pipeline carrying the clean water of Bear Trap creek (below) snakes along the valley floor.

MIKE HORSE

from pg. 1

exposed the ore body. Now, the roads that crisscrossed the hillsides above have been removed. The slopes have been recontoured and covered with clean borrow material from the UBMC repository, that has been mixed with compost and sugar beet lime. The new soil has been covered with slash to slow runoff and provide sheltered spots where new vegetation can take root. Plans call for seeding it in the fall.

At the head of the draw, low permeability glacial till brought in from the repository, water-conducting Transnet and a liner are being installed to prevent groundwater and runoff from infiltrating into the “Little Nell” vein, which was one of the main veins mined out during the mine’s heyday. Running across the small valley, water that reaches the “Little Nell” becomes contaminated by high metals content which is considered “hotter” than that of the main Mike Horse vein. The design should also keep any water that might well up out of the ore body from reaching the freshwater stream.

Nearer the confluence of the Mike horse and Bear Trap, Haaland pointed out

piles of coarse mill tailings from the original jig mill used in the 1930s. She said they were the “hot-test” of the entire project.

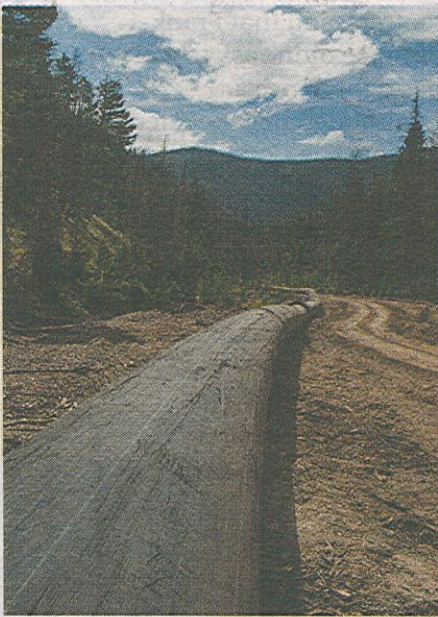
“We have piles like this all along here. They would just come along her and just dump it wherever,” she said. “I’m glad it’s going to be gone this year.”

Although the 1975 flood washed some 200,000 cubic yards of contaminated tailings out of the impoundment and into the Blackfoot River, she pointed out that the old tailings show that the river had been impacted by some degree of contamination well before then.

Work continues in the Bear Trap as well. Some 1700 feet of Bear Trap Creek now flows through a re-constructed channel in the valley floor before entering a massive pipe that keeps the clean water away from the remaining contaminated soil and rock.

Some of the old tailings still remain in Bear Trap, but they are scheduled for removal this summer as restoration of the streambed continues down the drainage

In total, this year’s con-



tract calls for about 189,000 cubic yards of material to be removed from the Bear Trap and Mike Horse drainages.

“We’ve got a ways to go yet,” Haaland said. The discovery of the “mystery pipe” added an additional year to the planned schedule, but the project is expected to be completed by 2019.

Next year, clean-up efforts should move down the valley and into the fragile wetlands, which still hold tailings washed downstream in the 1975 flood. Haaland said the excavations in the wetland will be very detailed and targeted, adding that the bulk of the contamination there was contained to the east side of the wetlands by an old drill road built through them by the Anaconda Company in the 60s.



Chris Drury discusses his concept with Steve Woodhouse. (BPSW photo)

DRURY

from page 1

“fantastically beautiful.”

In his work, Drury examines concepts such as the connections between nature and culture or between microcosm and macrocosm and relies on the materials at hand, which he said he tries to fit into the place, context and culture.

“I use different materials and all sorts of processes because the context is a site, a place. That’s the starting point. There needs to be a conversation...this is very specific,” he said.

Although his work uses a variety of media, whirlpools and vortices are a recurring motif in Drury’s art and the installation he has planned for Sculpture in the Wild is in keeping with that. His whirlpool, to be created of local beetle-killed logs and river rock it, will slope inward to a depth of about nine feet, with logs darkened by charring as they near the center.

Drury has something else in mind for the logs as well.

“I’m going to carve them each,” he said. “Because it’s an energy work, each log gets energized by carving them with lines that go round. In a sense the log is spinning itself. The whole thing is spinning.”

Drury said the time spent carving the logs may make the three-week residency a challenge, particularly since the nature of the work won’t really require a large volunteer force. However, with between 200 and 250 logs will need to be debarked for the project ahead of time and Becky Garland, president of Sculpture in the Wild, said volunteers will be needed for that.

Garland said she didn’t

get to spend much time with Drury while he was here, but she thinks his installation is just the right fit for the sculpture park, conceptually and aesthetically.

“It’s one of those things...that make you scratch your head and say ‘hmm, that is so cool,’ she said. “It’s going to be such a really amazing piece.”



Drury also believes his design will fit well with the existing work at Sculpture in the Wild, which he believes is off to a good start. “It’s very intimate and I think it’s wonderful addition to the town.”

Drury said he knows Alan Counihan quite well, but hasn’t had the chance to work with most of the other artists who have created pieces here. He does appreciate the quality of their work, though.

“I think it’s really good actually. I love Steven Siegel’s work. We’ve worked in a lot of the same places, but I’ve never met him,” Drury said. “I love Kevin’s Teepee Burner. I think it’s a brilliant first statement. I really like Alan’s. I think it’s very poetic. He’s a very poetic guy. It’s a very subtle, poetic (piece).”

Drury did get to spend some time with 2017 BPSW artist in residence Patrick Dougherty, who also visited Lincoln to check out the site and to visit with board members and project donors. Dougherty, like Drury, is well known in environmental art circles for his fantastical and complex creation made of willow branches.

BPSW is requesting that anyone interested in lending a hand can contact Becky Garland at 406-431-0325 or Steve Woodhouse at 406-793-4087.



BUSHWACKERS

STEAKHOUSE

362-4424

We stay open late for you serving great food as you travel through our beautiful town of Lincoln.