Testimony of Mike Scott, Sierra Club re: PSE IRP and Colstrip

My name, for the record, is Mike Scott and I am the Associate Organizing Representative for the Sierra Club in Billings, MT. I work on issues related to the mining and burning of coal in Montana. I also manage a small ranch south of Billings and am the 4th generation of my family to be involved in agriculture in this country.

I introduce myself in both of my professional capacities because I am here to talk about the impacts of the Colstrip Power Plant on agricultural operations surrounding the plant. Specifically, it has come to our attention that Puget Sound Energy does not anticipate additional costs related to the ongoing coal ash problem at their power plant. The lack of planning for additional expenses is sending a troubling message to Montana; that Puget Sound Energy either does not know that there is a catastrophic leak in several of their ash impoundments or they just don't plan to do anything about it. Regardless if PSE's plan, I am here to inform the UTC that I do believe there will be additional expenses and that PSE should be required to account for them in their current planning. There is no scientific evidence that has been presented to the public that demonstrates that measures currently being attempted by Puget Sound Energy and Montana Department of Environmental Quality to stop the leaks are effective, nor is there any evidence that these measures are reducing the pollution that is already under the ground.

Coal ash and the AOC

Before the hearing today, I had the opportunity to review a letter submitted to the Washington UTC on behalf of ranchers surrounding the Colstrip area that are impacted by the leaking sludge impoundments. I have worked closely with with many of these ranchers for years and I can say with certainty that they posses a profound amount of technical knowledge regarding the coal ash leaks in their community. This letter highlighted why PSE is not out of the woods when it comes to coal ash at the Colstrip power plant.

Landowners in and around Colstrip were first informed that the ash impoundments associated with units 1 & 2 were leaking in 1980. Though this remained out of the public eye for some time, the ash impoundments continued to leak as the larger two units of Colstrip were built and put on line. Sometime after that, ash impoundments associated with units 3 & 4 also began to leak. Now, 33 years later, the ash ponds are still leaking.

The leaking ash ponds at Colstrip are no trivial matter. This is not an environmental technicality. This is a direct threat to the lives and livelihood to those who live and ranch around Colstrip. Lead and mercury, both devastating to early childhood development, are commonly found in coal ash. Arsenic, chromium, boron, and sulfate have already been detected in the groundwater due to the leaking ponds. Some of these constituents are have been found at staggering levels. Boron, which is lethal to humans at 2

milligrams per liter, has been detected in wells at 13 times the EPA's established safe standard of 1.4 milligrams per liter.

Cows cannot handle the same things human beings can. Sulfate levels, for example, that are perfectly safe for people are lethal to cattle, causing scouring and slow death. Given that the area around Colstrip receives roughly 14 inches of precipitation a year, clean, safe groundwater is the back bone to any working ranch there. The loss of a single spring can make a section unusable, dramatically hitting the pocket books of the family ranches that have been in operation for over one hundred years. This is not simply a matter of drilling a new well either, which can cost thousands of dollars. There is no guarantee that new wells will provide good water. Water cannot be hauled by truck into undeveloped ranch land daily. Simply put, contaminating water on ranch land is taking money directly out of the pockets of hard working Montanans. These are not numbers or statistics, these are real people who are being hurt.

I point this out because I want the UTC to understand that several things. The people living in and around Colstrip have been directly impacted already and those who have not yet been impacted are living in fear of when the plume will reach the groundwater they depend on for their own families and to make a living. These people are not going simply roll over and give up their way of life so that PSE can save save a few bucks. They will continue to work on this issue through every available avenue until the coal ash problem has been resolved in a way that meaningfully reduces the threat of water contamination and stops the leaks.

In a feeble attempt to address the problem, the Montana DEQ recently issued an Administrative Order on Consent (AOC). The AOC is a paper exercise, that maintains the status quo of a legacy of pollution in the Colstrip area. The current administrative order of consent is an unsustainable solution that fails to address the problem at Colstrip.

AOC and Water Rights

Now I would like to shift gears. Let me be very clear, I do not believe that what I am about to present has been considered as a liability in the proceedings thus far. It is not mentioned in PSE's IRP, so I am not sure how you are going to address this liability. This problem, regardless, is not going away.

Montana's most precious resource is not gold, oil or coal. It is water. Agriculture is our largest industry and accessibility to enough water of high quality is imperative to the operation of a working farm or ranch. I point this out because both to the north and south of Colstrip, ranches cover the landscape and have been in operation since the 1880's. These people were there long before the power plant started operation and will be there long after it is gone.

In Montana, we manage water under the doctrine of prior appropriation. In a nut shell, prior appropriation means "first in time, first in right." This means that when you want to

use water for beneficial use in Montana, it's very likely that you have to file an application for a water right. Water rights are based on a first in time basis. If someone owns a water right that is junior to your right, and they are impacting your access to water, you can then challenge the operation of their water withdrawals by making a call on their water.

The Montana Department of Environmental Quality allowed, through the administration of the AOC, the drilling over over 200 "pump-back" wells surrounding the leaking ash impoundments. These wells are pumping somewhere near 1.3 million gallons of water per day. The idea is that they will pump the toxins back into the ash ponds. But, they are not only capturing the toxins, but also the fresh groundwater that other prior appropriators count on. This is reducing the hydrostatic pressure in the aquifer which will effect wells and springs of adjacent property owners. They are then taking this water and either putting it to use in the power plant or evaporating it. The latter method of water management has already been determined to be a illegal waste of groundwater in Montana.

The problem with this plan, among other problems, that I want to highlight is that this is stealing water, plain and simple. Though the DEQ has overseen the implementation of this plan, the DEQ has absolutely no authority to grant water rights. The Montana Department of Natural Resource Conservation reserves that authority. The DNRC, under a previous rule, had allowed wells under 35 gallons per minute or less than 10 acre feet per year to be drilled without a right. Many of the wells surrounding the leaking ash ponds are currently pumping in excess of 35 GPM or 10 acre feet per year. The others are abusing this loophole. The 35 gallon per minute exemption was never intended to be used to drill hundreds of small wells in the same area. The collective systems of wells are certainly violating this rule.

The DNRC held a hearing in September of 2013 on a new rule that would close this loophole. Ranchers from the Colstrip area as well as the Montana Stock growers Association both expressed their support for this rule change. Regardless of whether or not this rule changes, it appears that the the continued operation of this pump back system will be in violation of this provision.

Colstrip will eventually need to apply for or purchase water rights if they want to continue to rely on this pump back system. It is only a matter of time before their massive groundwater withdrawals conflict with senior water rights holders who will challenge the operation of these wells. They won't be able to afford not to, since this would mean they were losing their water and thereby losing their ability to grow food for urban centers like this. This scenario could effectively end the weak attempt at mitigation under the AOC.

It is not prudent to wait until water wars start flaring up between family farms and ranches and the corporate owners of Colstrip to start working on the permanent fix. Now is the time to start making the necessary financial plans to start working on what will be an expensive solution to manage the millions of tons of coal ash produced at the plant.

Rural Montanans will not simply stand by and watch PSE skirt its responsibilities. Montanans are generally a fair people who expect a fair deal. If you break something, you need to fix it. The owners and operators of Colstrip have lost the trust Montanans were willing to grant. Now its time to earn it back. Since they are not voluntarily stepping up and taking responsibility for the the toxic mess they've left under the ground, its now up to you, members of the UTC, to make them take responsibility and plan for it.

Thanks you.

August 16, 2013

Washington Utilities and Transportation Commission
P.O. Box 47250
1300 S. Evergreen Park Dr. SW
Olympia, WA 98504-7250
Docket #UE-120767 (and UG-120768)

RE: Comments on Puget Sound Energy's Integrated Resource Plan

Dear Chairman Danner and Commission Members:

It has come to the attention of the undersigned ranchers and home owners in the Rosebud Protective Association that Puget Sound Energy is expecting no costs associated with the leaking coal ash ponds at the Colstrip Generating Station located in Colstrip, MT. As home owners and ranchers who not only live and work in the surrounding area, but are also potentially impacted by the contaminants now in the ground water due to these leaks, this is a cause of great concern. We have tried to be good neighbors to the power plant and only wish that the owners and operators of Colstrip would also do so in kind. This has not been the case, however. Our state regulatory agency has also failed, from our perspective, to address the problem. Below is a timeline to the best of our accounting of the coal ash problem at Colstrip and the involvement of the Rosebud Protective Association (RPA). The following is a summary of correspondence RPA and Northern Plains Resource Council, RPA's parent organization, have on file. RPA members have been voicing their concerns about this issue for three decades. We have hundreds of letters on file to back up this history.

Summary of Rosebud Protective Association's History with Coal Ash Enforcement and Colstrip

In July of 1976, the Montana Board of Natural Resources and Conservation (BNRC) issued a Major Facilities Siting Act (MFSA) Certificate for Colstrip units 3 & 4 with special conditions for siting the ponds. These conditions were expected to be followed at the power plant units and ash ponds were constructed.

Two of these conditions (12c and 12d) state:

12c: That the seepage from the existing surge pond and any enlarged or additional surge ponds be monitored as specified by the State Board of Health and Environmental Sciences, and that every feasible engineering means be taken by the applicants to minimize such seepage.

12d: That the sludge pond or ponds shall be completely sealed. If the conventional means such as compaction and bentonite application do not seal the pond(s), as indicated by monitoring wells the applicant shall install and operate, then extreme measures even up to complete sealing by a plastic membrane shall be taken.

1980-1981—RPA members and local landowners around Colstrip were in constant contact with then Montana Department of Natural Resources director, Leo Berry, reporting to him that then owner of Colstrip plant, Montana Power Company (MPC), was not doing all they could do to prevent the leaking ash ponds. They also reported MPC was violating conditions 12C and 12d in their Major Facilities Siting Act (MFSA) certificate. They met with DNRC to discuss this.

1981 and 1982—RPA and NPRC were trying to bring the problems associated with the proposed fly ash pond to the BNRC's attention. Numerous letters were written back and forth, the Board came out and visited the site, RPA and NPRC submitted comments and testimony at BNRC meetings in Helena. Because of the lack of action on the part of state agencies and their boards, RPA and Northern Plains filed a petition for a declaratory ruling (before the Board of Environmental Review) on condition 12c. They did not include 12d because they were under the impression the board would address this on their own.

1982— Despite being contacted continuously be local landowners, DNRC, DHES and other agencies involved had failed to do anything thus-far to resolve the leaking ash ponds. RPA and Northern Plains contacted Leo Berry, DNRC director, once again to reiterate that the MPC was violating their original certificate and the organization would take legal action if the issue was not resolved.While MPC was in the process of building new ash ponds for Colstrip 3 & 4 RPA and Northern Plains filed another petition for a declaratory ruling with the Montana Board of Natural Resources and Conservation (BNRC). The petition was to clarify what BNRC meant when they said fly ash pond for 3&4 had to be "completely sealed"

1983—On January 21, 1983 BNRC dismissed RPA and Northern Plains petition for a declaratory ruling. They directed MPC and the DNRC to meet with RPA and Northern Plains to discuss their proposal for sealing the ponds and plans for monitoring and mitigation. On February 10, 1983 this meeting occurred and Bechtel (the company hired to construct the ponds) laid out their plan to keep the ponds sealed. Montana Power Company was being sued by BNRC, DNRC, Northern Plains, RPA, Genie May Garfield, Genie Land Company, Rosebud County Board of Commissioners. The litigation went to the Montana first judicial court, who made a ruling in June 1983: The clear meaning of condition 12(d), taken in the context of the Board's findings (in MFSA certificate) that some seepage was expected is that the pond as constructed for the Relators may leak in small amounts but if the leakage is detected by the monitoring wells, the Relators will have to resort to more stringent measures, up to and including the installation of a plastic liner.

1984— In January 22, 1984 all parties entered into an agreement (the 12d stipulation) agreeing with this court ruling, but with several conditions for MPC to fulfill.

1984-1988—Parties who signed the 12d stipulation negotiated and carried out the agreements (monitoring wells and reports from those wells) A technical committee was formed to carry out the agreement.

1985—Colstrip units 3 & 4 both went online.

June 29, 2009 – Colstrip Steam Electric Station (Units 1 & 2 Stage Evaporation Ponds) get listed in the EPA's top 40 High Hazard Potential coal ash impoundments.

February 24, 2010 – DEQ conducts a public hearing on a proposed Administrative Order on Consent (AOC), an agreement that will legally allow the coal ash ponds in Colstrip to leak.

April 12, 2010 – the comment period for the AOC ends.

August 3, 2012—The AOC was finalized and signed by PPL Montana and DEQ.

Since the implementation of the AOC with the state of Montana, there has been no evidence presented that demonstrates that the remediation plan is effective. Current litigation is pending on the AOC because it is woefully inadequate to address the problem. Over 800 wells have been drilled to monitor the plume of contaminated water and hundreds of these wells have been converted to pump back wells. In July, the DEQ held a public meeting on a site report for one of the ponds as prescribed by the AOC and reported that water quality had improved in some monitoring wells and degraded further in others. We are told that these pump back wells will hopefully collect the contaminated water and return it to the leaking ponds. These ponds are in the process of being lined, but sludge ponds with plastic liners can leak as we have already seen at Colstrip. We feel that the only real way to stop further water contamination and prevent Colstrip from becoming a superfund site is to convert the plant to dry ash storage.

Furthermore, the pump back system is dewatering a precious aquifer which ranchers rely on to water cattle. In 2012, the capture wells dewatered the aquifer at a rate of 965 gallons per minute. That is over 1.3 million gallons of water per day, 365 days a year. Cattle ranching is one of the few industries that was here before the coal industry and will be here long after the coal industry is gone. Water is essential to continue ranching, plain and simple. This is a region that receives around 15 inches of precipitation each year. As the operators of Colstrip have learned, the soils in the area do not lend themselves to the construction of water impoundments, making groundwater one of the most important resources for a sustainable economy in south east Montana. The AOC's plan to continue to pump water from the aquifer is unsustainable as it will eventually conflict with senior water rights. The time to start developing a sustainable solution for the Colstrip ash ponds is now.

We are not advocating for the closure of the plant, nor are we attempting to build huge administrative hurdles. If it were up to us, we would have settled this issue with the owners and operators of the plant directly with a meeting and a handshake. Unfortunately, as the history

demonstrates, we have no faith that the owners and operators will do the right thing simply because it's right. We do not understand why PSE feels its business is more important than ours or why they should be treated any different than we would be. We are simply asking that the Colstrip Generating station does the ethical, moral, and neighborly thing by fixing their mess so that our businesses can continue and be passed on to the next generation. Please ensure that PSE makes financial plans to address this problem at their plant.

Sincerely,

Brad Sauer
Co-Chair
Rosebud Protective Association

Walter Archer
Chair
Northern Plains Resource Council
220 S. 27th Street
Billings, MT 59101

individual well over 35gpm
system wells over 35 gpm
wells over 10 acre feet
(3,255,514 gallons)
systems over 10 acre feet

Table 6-1
Colstrip Steam Electric Station
Units 1 Through 4 Plant Site Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Units 1 & 2 Brine Pond Area		
B-1	840,552	1.6
B-4	73,529	0.1
B-5	293	0.0
4S	1,649,679	3.1
19SP	31,594	0.1
26SP	836,415	1.6
29SP	4,009,248	7.6
70SP	366,984	0.7
111SP	1,291,077	2.4
System Total	9,099,371	17.3
Units 1-4 Sediment Retention Pond/Units 1 & 2 A/B Pond Dewatering System		
1D	692,200	1.3
5M	2,992,127	5.7
5S	2,761,965	5.2
10M	7,245,385	13.7
10S	3,519,765	6.7
55D	541,810	1.0
56D	12,445,662	23.6
58M	1,533,470	2.9
59M	39,260	0.1
System Total	31,771,644	60.3
31M	766,692	1.5
SRP-1	78,990	0.1
SRP-2	200,791	0.4
SRP-3	5,173,529	9.8
SRP-4	6,324,134	12.0
SRP-5	4,029,397	7.6
SRP-6	493,946	0.9
SRP-7	469,973	0.9
SRP-8	1,479,385	2.8
System Total	18,250,145	34.6
Plant Site Area Trailer Park Collection System		
98M	6,569,701	12.5
106A	1,243,560	2.4
107A	4,562,166	8.7
108A	7,523,627	14.3
System Total[1]	19,899,055	37.8

2011 gpm

49.9

40.1

45.5

Table 6-1 (continued)
Colstrip Steam Electric Station
Units 1 Through 4 Plant Site Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Units 1 & 2 Bottom Ash Clearwell Collection Sumps		
Primary System[3]	701,093	1.3
Secondary System[4]	10,604	0.0
System Total	711,697	1.3
Units 1-4 Sediment Retention Pond		
74A	10,270,450	19.5
75A	7,984,349	15.1
79A	35,144,751	66.7
System Total	43,129,100	81.8
43S	1,683,423	3.2
78A	8,751,439	16.6
System Total	10,434,861	19.8
82A	5461416	10.4
6M	3,108,872 no	5.9
68A	3,096,408 no	5.9
B Pond Collection Sumps		
Primary System[3]	701,093	1.3
Secondary System[4]	10,604	0.02
System Total	711,697	1.35
Units 3 & 4 Bottom Ash Pond		
21S	2,713,276	5.1
51SP	2,559,462	4.9
52SP	280,277	0.5
53SP	3,788,652	7.2
54SP	442,778	0.8
System Total	7,071,168	13.4
WECO Well	26,280,000	50.0

2011 gpm

76.5

34.2 (almost over)

[1]Flow at each pumping well is measured by opening a valve near the wellhead and recording the time it takes to fill a container of known volume. This method is fairly accurate when little back pressure exists on the discharge pipeline. However, this method tends to result in overestimation of actual flow in pressurized systems.

[2] Total gallons pumped per year divided by minutes per year

[3] Groundwater below liners

[4] Water between liners

Table 7-1
Colstrip Steam Electric Station
Units 1&2 SOEP and STEP Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Stage I Evaporation Pond Area		
966A	3,837,619	7.3
EAP-119	1,598,915	3.0
976D	1,149,741	2.2
System Total	2,748,655	5.2
369D	126	0.0
375D	777,915	1.5
376D	553,091	1.0
EAP-205	501,448	1.0
EAP-208	384,328	0.7
System Total	2,216,908	4.2
Stage II Industrial Park Area		
382A	1,534,205	2.9
910A	10,340,732	19.6
913A	1,823,234	3.5
System Total	13,698,170	26.0
Stage II Main Dam Area		
Stage II Main Dam Sump	2,796,480	5.3
System Total	2,796,480	5.3
377A	5,451,862	10.3
378A	2,437,026	4.6
System Total	7,888,888	15.0
379D	27,854	0.1
905D	167,682	0.3
906D	3,271,285	6.2
911D	4,997,593	9.5
984D	3,987,594	7.6
985A	98,528	0.2
987D	3,903,961	7.4
988D	811,767	1.5
989D	547,152	1.0
System Total	17,813,415	33.8
927D	435,176	0.8
928D	2,234,915	4.2
932D	5,807,072	11.0
933D	49,970	0.1
934D	174,273	0.3
System Total	8,701,407	16.5

Table 7-1 (continued)
Colstrip Steam Electric Station
STAGE I & II SOEP/STEP Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Stage II Main Dam Area (continued)		
991A	665,173	1.3
993D	1,896,218	3.6
994A	1,341,683	2.5
997A	427,777	0.8
998A	674,092	1.3
2000D	1,821,827	3.5
2003D	3,441,514	6.5
2008D	4,224,057	8.0
2013A	15,794,427	30.0
2016A	1,176,492	2.2
2021D	35,633	0.5
System Total[1]	31,498,893	60.2
380D	187,672	0.4
383D	1,508,755	2.9
393D	1,428,307	2.7
System Total	3,124,734	5.9
2019D	562,407	1.4
System Total	562,407	1.4
922A	3,606,663	6.8
958D	920,382	1.7
System Total	4,527,045	8.6
960D	5,164,491	9.8
961D	5,983,957	11.4
962D	4,589,687	8.7
963D	2,434,096	4.6
968D	3,822,378	7.3
969D	1,567,621	3.0
970D	154	0.0
System Total	23,562,384	44.7
924A	230,330	0.4
Stage II Downgradient Area Collection Systems		
916A	17,944,516	34.0
938A	2,739	0.0
940A	0	0.0
System Total	17,947,255	34.1 (close)
943A	5,869,229	11.1
944A	10,188,765	19.3
945A	2,846,145	5.4
System Total	18,904,139	35.9

[1]Flow at each pumping well is measured by opening a valve near the wellhead and recording the time it takes to fill a container of known volume. This method is fairly accurate when little back pressure exists on the discharge pipeline. However, this

[2] Total gallons pumped per year divided by minutes per year

Table 8-2
Colstrip Steam Electric Station
Units 3 & 4 Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Units 3 & 4 EHP Main Dam Sump/Interception Trench		
Main Dam Valley Drain Sump[3]	26,550,144	50.6
Main Dam Lower Interceptor Trench	3,813,804	7.3
604A	124,504	0.2
605A-2	36,466	0.1
1084A	151,974	0.3
1087D	508,576	1.0
System Total	821,521	1.6
654A	2,516,153	4.8
System Total	2,516,153	4.8
552D	341,188	0.6
613D	1,518,877	2.9
616D	2,550,059	4.8
618D	126,796	0.2
619D	4,808,571	9.1
System Total	9,345,492	17.7
644D	3,386,297	6.4
645D	7,610,517	14.4
System Total	10,996,814	20.9
Units 3 & 4 EHP Saddle Dam Area		
Saddle Dam Sump[4]	16,909,632	32.2
560A Trench Sump	857,521	1.6
1039A	4,977,815	9.4
1051A Trench	0	0.0
1073A Trench	743,877	1.4
1079A Trench	4,874,405	9.2
1089D	361,628	0.7
1090D	4,825,241	9.2
1093D	1,164,423	2.2
1095D	4,817,403	9.1
1097D	6,351,712	12.1
1098D	3,859,794	7.3
1099D	8,551,935	16.2
1100D	10,187,607	19.3
1101D	6,872,030	13.0
1102D	443,747	0.8
System Total	58,889,138	111.7
646D	2,829,659	5.4
647D	2,268,612	4.3
648D	854,014	1.6
System Total	5,952,285	11.3
556D	60,948	0.1
609D	255,292	0.5
610D	1,672,716	3.2
621D	1,328,714	2.5
1080D	4,566,023	8.7
1081D	1,292,140	2.5
1083D	2,082,663	4.0
1115D	3,186,243	6.0
1128D	1,837,824	3.5
1129D	1,988,165	3.8
System Total	18,270,727	34.7 (close)

2011 spm
55.0
44.4
108.5
30.3

Table 8-2 (continued)
Colstrip Steam Electric Station
Units 3 and 4 Area Collection Wells
2012 Collection Data

Well #	Estimated Total Gallons[1]	Estimated Average Gallons per Minute[2]
Units 3 & 4 EHP West Side		
656R	1,855,489	3.5
1031R	769,957	1.5
1034R	714,199	1.4
1037R	4,506,891	8.6
System Total	7,846,536	14.9
Units 3 & 4 EHP West Side/South Side		
North SP-15	4,234,119	8.0
Secondary Sump	437,409	0.8
System Total	4,671,528	8.9
South SP-15	553,136	1.0
DP-5	29,034,632	55.1
1068A	650,736	1.2
System Total	30,238,504	57.4
694R	489,432	0.9
695R	559,491	1.1
1001R	368,350	0.7
1002R	3,852,150	7.3
1007R	1,440,692	2.7
1016R	0	0.0
1017R	3,487,907	6.6
System Total	10,198,022	19.3
Units 3 & 4 EHP South Fork Cow Creek		
592A	1,586,529	3.0
667A	0	0.0
668A	38,358	0.1
680A	219,391	0.4
681A	4,170,038	7.9
683A	622,548	1.2
684A	2,432	0.0
685A	51,095	0.1
686A	8,402,885	15.9
687A	690,181	1.3
688A	8,739	0.0
689A	123,565	0.2
690A	625,524	1.2
691A	3,712,209	7.0
System Total	20,253,496	38.4
Units 3 & 4 EHP Area South Fork Cow Creek (West Area)		
1019AM	141,439	0.3
1024AM	2,453,684	4.7
1025AM	0	0.0
1026AM	290,820	0.6
1065A	4,906,505	9.3
PSW-4A	1,519,748	2.9
System Total	9,312,197	17.7
Units 3& 4 EHP Area Drain Pit #3 Interception Trench		
Drain Pit #3 Interception Trench Sump	926,208	1.9

[1]Flow at each pumping well is measured by opening a valve near the wellhead and recording the time it takes to fill a container of known volume. This method is fairly accurate when little back pressure exists on the discharge pipeline. However, this method tends to result in overestimation of actual flow in pressurized systems.

[2] Total gallons pumped per year divided by minutes per year

[3]Collection at Main Dam Valley Sump includes discharge from upper and lower interception trenches and from wells 581D, 604A, 605A-2, 654A, 1084A, and 1087D.

[4]Collection at Saddle Dam Sump includes discharge from 560A-Trench, 1039A, 1051A-Trench, 1073A-Trench, 1079A-Trench, 1089D, 1090D, 1093D, 1095D, 1097D, 1098D, 1099D, 1100D, 1101D, and 1102D.

Montana Department of Natural Resources and Conservation
Attn: Director John Tubbs
PO Box 201601
Helena, MT 59620-1601

Dear Mr. Tubbs,

As livestock and grain producers, we are keenly aware of Montana's long tradition in the Montana Water Use Act of first in time, first in right, and the principles of prior appropriation. Access to water is essential for our agricultural operations, and we take great strides to assure that our operations comply with the intent, tradition, and spirit of Montana's water use laws. In turn we respect our neighbors' individual property rights and access to water and we expect them to do the same.

It recently came to our attention that the Montana Department of Natural Resources and Conservation (DNRC) is initiating a rulemaking process that will clarify a major aspect of Montana water rights law. Montana law generally requires a permit for the withdrawal of 35 gallons per minute or more than 10 acre-feet annually of groundwater. Mont. Code Ann. § 85-2-306(3). DNRC is proposing to clarify the administrative rule that interprets this section of law and defines "combined appropriation" under Admin. R. Mont. Rule 36.12.101(13). We would like to offer our comments and suggestions on the formulation of this rule by highlighting a specific circumstance in our area.

We regrettably must inform you of an unauthorized and potentially illegal withdrawal of large quantities of groundwater by Pennsylvania Power and Light and the other owners (Owners) of the Colstrip coal-fired power plant in Colstrip, Montana. As detailed below, the withdrawal and subsequent use of this water appears to violate the Montana Water Use Act, could adversely impact senior water rights holders, and could threaten the integrity of Montana's water laws. We respectfully request that you investigate these concerns and take these comments into consideration during the rulemaking process.

The Colstrip plant contains various impoundments for contaminated waste-water. These impoundments cover over 800 acres, and accept water contaminated from a variety of sources at the Colstrip facility, including water from the air pollution control systems, bottom ash and fly ash, cooling water, and contaminated runoff from the coal pile.

These ponds have been leaking contaminated water into the surrounding ground and surface waters for decades. To combat this problem the Owners, with the approval of the Montana Department of Environmental Quality (DEQ), manage the plume radiating from the impoundments by installing a system of 800 pump-back and monitoring wells. Each year, as monitoring wells detect contaminated water, a new system of monitoring wells is installed in a perimeter further from the plume, and the inner perimeter of monitoring wells is converted into a "pump-back" system that pumps contaminated groundwater back into the impoundments. DEQ allowed the continuation of this pump back system with its issuance in July of 2012 of an Administrative Order on Consent.

A portion of the water in the impoundments is evaporated and some water goes to a wastewater treatment system where the processed water is returned to the plant for the raw water system and Colstrip's paste plant. Waste of groundwater is specifically prohibited under Mont. Code Ann. § 85-2-205. The beneficial use of water resources requires a water right.

The consulting firm Hydrometrics recently prepared a report for PPL Montana entitled *Evaluation of 2012 Hydrologic Monitoring Data From Colstrip Units 1 Through 4 Process Pond System, Colstrip Steam Electric Station, Colstrip Montana*. This report provides a high level of detail regarding the water quantity issues at the Colstrip facility. Tables 6-1, 7-1, and 8-2 of this report provide a list of monitoring and pump-back wells associated with different containment ponds, as well as an estimation of each wells average gallons per minute and estimated total gallons of water pumped in 2012. A similar report was prepared in 2011. (See attached.)

A simple analysis of Hydrometrics data from 2011 and 2012 shows that many of the wells or well systems serving the pump-back system violate the law. This pumping system removes upwards of 900 gallons per minute from Armells Creek and Rosebud Creek drainages, very likely causes well draw-down for prior appropriators, and likely depletes connected surface flows. A review of DNRC's Water Rights Query System does not indicate that the Owners have obtained a water right for the individual wells or the system of wells.

We ask that DNRC investigate the pump-back system at Colstrip to ascertain whether the Owners are violating the Montana Water Use Act. If the DNRC finds violations, we ask that PPL be required to comply with Montana's water use laws, as our families and operations have done for over a century. We also ask that in DNRC's proposed revisions to rule 36.12.101(13) that it consider the situation at Colstrip and the possible impacts that a single large consumptive user is having on prior appropriators.

We hope that this issue will be a catalyst to bring DEQ and DNRC together into a new era of cooperation and coordination that has not previously occurred in this matter. Water is the life-blood and backbone of Montana and is essential for the success of our individual agricultural operations. We invite you to visit our ranches and see first-hand the importance of water availability on our continued operations.

It should be noted that the while landowners listed below have addresses of Forsyth, all landowners listed live within the Rosebud Creek and Armells Creek watersheds south and west of Colstrip, and are concerned with the leaking Effluent Holding Ponds (EHP) in each watershed.

Sincerely,

Rocker Six Cattle Co.
Wally and Clint McRae
3607 Rosebud Creek Rd.
Forsyth, MT, 59327

Diamond Ranch
Dave Davenport
63 Diamond Ranch Lane
Forsyth, MT, 59327

Joe and Helen Curran Ranch
3469 Rosebud Creek Road
Forsyth, MT 59327

Crosscheck Ranch
Roger Sprague
247 Greenleaf Road
Forsyth, MT, 59327

Rosebud Reds Ranch
Connie Bailey
3964 Hwy. 39
Forsyth, MT 59327

Golder Ranch Inc
Nick Golder, Brad Sauer
Hwy 39
Forsyth, MT 59327

Salmond Ranch Co.
Brent and Lori Salmond
301 Ashenhurst Rd.
Forsyth, MT 59327

Cc:
Tracy Stone-Manning, Director, Montana Department of Environmental Quality
Tim Davis, Administrator, Water Resources Division, Montana DNRC