

New Horizons students test water quality

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POCATELLO — The seven students in Robert Miron's environmental science class at New Horizons School intensely studied petri dishes speckled with red and blue spots Wednesday afternoon.

The blue spots indicated fecal coliform bacteria in the water samples contained in the dishes, while the red spots revealed E. coli colonies. If nothing else, the concentrated dot counting made the students less than eager to wade or swim in Pocatello Creek.



Michelle Byrd, source water analyst for Idaho's Department of Environmental Quality, discusses water quality findings with Marcelino Albino, 16, Logan Ruffi, 18, Valerie Wilson, 18, and Shadamar Sakurada, 18, from left, at Robert Miron's environmental science class at New Horizons High School Wednesday afternoon.

The samples were collected from various local streams which the class visited earlier in the week. The dishes were stored for several hours in an incubator at a temperature equivalent to the digestive system of warm-blooded mammals.

After counting the dots that had formed on the 5-mg dishes, calculations were done to compare the students' results with the Idaho Department of Environmental Quality standards that are based on 100-mg samples.

The purpose of Miron's five-week class is to assess local water quality. The 15- to 18-year-old students work with the DEQ and Idaho State University graduate student Steve Seiler, who is part of the National Science Foundation GK-12 program, to compile information and record their

results.

At the end of the semester, they will display those results on a poster. Last semester's environmental science class, which included 18 students, presented its poster at the district's Science Showcase.

Keeping students involved and interested in three-hour block classes at the alternate school isn't easy, Miron admits. But the hands-on approach of taking frequent field trips, analyzing data and collecting samples is turning Miron's environmental science class into

a student favorite.

"It's interesting," junior Brandt Gunn said. "It's different than what we've been doing in other classes. It's better than just sitting in a desk looking at books."

Seiler, who works with the class 10 hours every week, is completing a Ph.D. in fish ecology at ISU. He will graduate in the fall. For him, working in the classroom is the best training for his own future career.

"I want to be a professor," Seiler said. "And the best way to get experience to be a teach-

er is to teach in a classroom."

And while Seiler is gaining experience for his future field, he hopes the projects in the class will spark some interest in the science field for the students — something he said he's already seen start to happen.

"It's fun to see kids who didn't give a care about the class when it started now really into what we're doing," Seiler said. "We tell them there are people out there getting paychecks for doing these exact same things. That seems to interest some of them."

DOW	13,525.65	NASDAQ	2,577.05	S&P 500	1,522.28
	-14.30		-10.97		-1.84

Local Stocks		52-WK RANGE			CLOSE	CHG	%CHG	YTD	DIV	
NAME	TICKER	LO	HI				%CHG			
AFLAC Inc	AFL	41.63	54.00	51.96	-2.0	-0.4	+13.0	0.821		
AMIS Holdings Inc	AMIS	8.48	12.63	12.11	-0.4	-0.3	+14.6	0.21		
AT&T Inc	T	25.01	41.50	40.41	-0.3	-0.1	+13.0	1.42		
Alcatel-Lucent	ALU	10.63	15.43	13.90	+2.4	+1.8	-2.3	0.21e		
Allied Capital Corp	ALD	25.65	33.07	31.19	-0.8	-0.3	-4.6	2.56f		
Altria Group	MO	50.50	71.86	71.39	-2.9	-0.4	+14.2	3.44		
American Ecology	ECOL	17.26	27.91	21.41	-0.9	-0.4	+15.7	0.60		
Am Ele Pwr	AEP	32.45	51.24	48.90	+0.2	...	+14.8	1.56		
American Home Mortg	AHM	19.51	36.96	22.26	+3.7	+1.7	-36.6	4.48f		
AmerisourceBergan	ABC	40.15	56.56	51.16	-1.4	-0.3	+13.8	2.00		
Anadarko Petrol	APC	38.40	51.45	48.84	+1.0	+0.2	+12.2	0.36		
Anheuser Busch	BUD	44.50	53.32	51.35	+2.8	+0.5	+4.4	1.18		
Apple Inc	AAPL	50.16	113.75	112.89	-6.5	-0.6	+33.1	...		
Auto Data	ADP	37.98	49.50	48.64	-4.4	-0.9	+10.5	0.92e		
AutoZone Inc	AZO	83.81	137.66	126.33	-5.7	-4.4	+9.3	...		
Avaya Inc	AV	8.85	14.89	13.80	-0.8	-0.6	-1.3	...		
BP PLC	BP	58.62	73.28	68.14	-0.4	-0.1	+1.5	2.42e		
Bank of America	BAC	45.86	55.08	51.35	-1.5	-0.3	-3.8	2.24		
Bed Bath & Beyond	BBBY	30.92	43.32	40.81	-0.6	-0.1	+7.1	...		
Best Buy Co	BBY	43.51	58.49	47.53	-3.8	-0.8	-3.4	0.40		
BldgMatHoldCo	BLG	13.12	28.69	14.44	+0.7	+0.5	-41.5	0.40		
CBS Corp B	CBS	24.82	33.04	33.24	+4.2	+1.3	+6.6	0.80f		
CSX Corp	CSX	28.60	47.38	44.25	-5.4	-1.2	+28.5	0.60f		
Cameco Corp	CCJ	30.90	52.18	51.32	+7.1	+1.4	+26.9	0.20		
Capital One FncI	COF	69.30	87.19	79.77	+1.5	+1.5	+3.8	0.11		
Cascade Bancorp	CACB	21.08	31.90	21.58	-1.8	-0.8	-30.5	0.36		
Chevron Corp	CVX	55.41	83.56	81.40	-7.8	-0.9	+10.7	2.32f		
Cisco Syst	CSCO	17.10	28.99	25.97	-4.0	-1.5	-5.0	...		
Citigroup	C	46.22	57.00	55.01	-0.7	-0.1	-1.2	2.16		
Clear Channel	CCU	27.17	38.30	38.20	+0.9	+0.2	+7.5	0.75		
CocaCola	KO	42.27	53.65	51.33	-1.5	-0.3	+4.6	1.36		
Coeur d'Alene Mines	CDE	3.55	5.84	3.64	-0.1	-0.3	-26.5	...		
Comcast Cp A	CMCSA	20.47	30.18	27.33	-0.3	-0.1	-3.2	...		
ConAgr	CAG	21.19	28.35	25.67	+3.2	+1.3	+4.9	0.72		
ConocoPhillips	COP	54.90	76.90	76.71	+8.6	+1.1	+6.6	1.64		
Con Edison	ED	41.95	52.90	49.73	-9.7	-1.9	+3.5	2.32		
Corporate Exec	EXBD	58.54	109.43	65.19	-4.2	-0.6	-25.7	1.60		
Deere Co	DE	66.90	123.40	115.64	-2.6	-1.8	+21.6	1.76		
Del Monte Foods	DLM	9.90	12.00	11.96	+0.5	+0.4	+8.4	0.16		
Dell Inc	DELL	18.95	27.89	26.26	-1.2	-0.5	+4.7	...		
Donnelley RR & Sons	RDR	28.50	43.62	42.76	-0.7	-0.2	+20.3	1.04		
Duke Energy	DUK	14.37	21.30	19.94	-3.5	-1.7	+3.2	0.84		
Encore Acquis	EAC	21.74	30.97	27.72	-4.3	-1.5	+13.0	...		
Exxon Mobil Corp	XOM	56.64	84.32	82.99	+2.2	+0.3	+8.3	1.40f		
FMC Corp	FMC	55.50	86.24	84.45	-5.6	-0.7	+10.3	0.72		
FPL Group	FPL	38.01	66.52	64.73	-1.36	-2.1	+18.9	1.64f		
FedEx Corp	FDX	97.79	121.42	106.06	+1.57	+1.5	-2.4	0.36		
First Data Corp	FDX	20.69	32.90	32.60	+0.1	...	+27.7	0.12		
Fortune Brands	FO	68.45	86.90	78.84	-3.7	-0.5	-7.7	1.56		
Genentech Inc	DNA	75.88	89.73	77.66	-7.1	-0.9	-4.3	...		
Gen Electric	GE	31.61	38.49	37.60	+2.6	+0.7	+1.0	1.12		
Gen. Growth Prop.	GGP	41.92	67.43	57.64	-6.3	-1.1	+10.4	1.80		
Genuine Parts	GPC	40.00	51.63	50.00	-6.5	-1.3	+5.4	1.46		
Glacier Bcp	GBCI	18.55	25.39	21.39	-1.7	-0.8	-12.5	0.48		
Global SantaFe	GSF	44.26	69.79	67.95	+4.5	+0.7	+15.6	0.90		
Hlth Mgmt Asc	HMA	9.78	12.50	10.56	-1.4	-1.3	+2.7	10.00e		
Heinz	HNZ	39.62	48.73	46.38	-0.6	-0.1	-3.0	1.40		
Hewlett Packard	HPQ	29.00	45.76	45.63	+0.5	+0.1	+10.8	0.32		
Highwoods Prop	HIW	29.27	47.36	39.56	-1.9	-0.5	-2.9	1.70		
Hillenbrand	HB	47.17	69.45	66.33	-2.1	-0.3	+16.5	1.14f		
Hoku Scientific	HOKU	2.12	7.54	4.44	-0.1	-0.2	+70.1	...		
Home Depot	HD	32.85	42.01	38.78	+2.5	+0.6	-3.4	0.90		
Home Federal Bancorp	HOME	13.50	17.99	16.93	-5.6	-3.2	-1.3	0.22		
Honda Motors	HMC	29.13	40.82	34.01	-0.5	-0.1	-14.0	0.56e		
Honeywell Intl	HON	35.53	59.37	56.54	-4.4	-0.8	+25.0	1.00		
Hubbell A	HUB/A	41.10	54.15	54.10	-0.2	...	+21.6	1.32		
iShares Emerg Mkts	EEM	81.35	127.79	126.90	-2.0	-0.2	+11.2	1.58e		
Idacorp	IDA	32.00	40.17	32.72	-4.9	-1.5	-15.3	1.20		
Ingersoll Rand	IR	34.95	51.14	48.46	-4.1	-0.8	+23.8	0.72		
IBM	IBM	72.73	108.05	105.58	-1.2	-1.0	+8.7	1.60f		
Int Flav Frag	IFF	33.85	52.99	51.54	-3.8	-0.7	+4.8	0.84		
Ivanhoe Energy Inc	IVAN	1.15	2.93	1.88	+1.2	+6.8	+39.3	...		
Johnson & Johnson	JNJ	58.97	69.41	63.81	+2.3	+0.4	-3.3	1.66f		
KeyCorp	KEY	34.24	39.90	36.31	-1.7	-0.4	+4.5	1.46		
Kroger Co	KR	19.37	30.43	29.52	-0.1	...	+28.0	0.30f		
Lilly Eli	LLY	50.19	61.00	59.40	-1.3	-0.2	+14.0	1.70		
Lincoln Natl	LNC	53.94	74.72	73.10	-6.5	-0.9	+10.1	1.58		
Lithia Motors	LAD	21.75	32.63	26.53	+0.2	+0.1	-7.8	0.56		
Loves Cos	LOW	26.15	35.74	31.79	+0.6	+0.2	+2.1	0.20		
MDU Resources	MDU	22.25	31.79	30.48	-4.5	-1.5	+18.9	0.54		
MPC Corp	MPZ	0.60	2.90	0.96	-0.4	-3.6	+1.5	...		
MWI Veterinary Sup	MWIV	29.25	39.05	38.50	+0.4	+0.1	+19.2	...		
Manpower	MAN	54.64	88.15	88.36	+1.2	+1.3	+17.9	0.64		
McClatchy Co	MNI	28.10	47.54	28.12	-3.7	-1.3	-35.1	0.72		
MedcoHealth Sol	MHS	47.08	80.55	77.86	+5.7	+0.7	+45.7	...		
Merck & Co	MRK	32.75	55.14	54.35	+2.0	+0.4	+24.7	1.52		
MetLife Inc	MET	48.66	69.35	67.76	-1.09	-1.6	+14.8	0.59f		
Micron Technology	MU	10.88	18.65	11.53	+1.5	+1.3	-17.4	...		
Microsoft Corp	MSFT	21.46	31.48	30.58	-1.1	-0.4	+2.4	0.40		
Monsanto Co	MON	37.91	63.90	60.49	-4.8	-0.8	+15.4	0.50		
NCR Corp	NCR	31.64	52.71	52.13	+3.0	+0.6	+21.9	...		
Nucor Corp	NUE	44.80	69.15	64.76	-9.8	-1.5	+18.5	0.44a		
OfficeMax Inc	OMX	38.78	55.40	44.84	-5.8	-1.3	-9.7	0.60		
Old Republic	ORI	20.08	23.74	21.52	+0.6	+0.3	-7.6	0.60		
Oracle Corp	ORCL	13.07	19.75	19.16	-2.1	-1.1	+11.8	...		
Penney JC Co Inc	JCP	59.51	87.18	78.79	+0.3	...	+1.8	0.80		
PepsiCo	PEP	58.35	69.64	68.69	+0.2	...	+9.8	1.50f		
Pfizer Inc	PFE	22.16	28.60	27.34	-0.3	-0.1	+5.6	1.16		
Piedmnt Nat Gas	PNY	23.40	28.44	26.71	-3.3	-1.2	-0.1	1.00f		
Plexus	PLXS	15.78	42.24	25.62	-3.1	-1.2	+0.2	-6.6	...	
Primewest Engy Tr g	PWI	17.01	31.50	21.45	-2.9	-1.3	+16.1	3.00		
Prudential FncI	PRU	71.28	103.27	101.35	-1.37	-1.3	+18.0	0.95f		
Puget Energy Inc	PSD	20.28	26.91	25.62	-3.1	-1.2	+1.0	1.00		
QwestCm	Q	6.44	10.10	10.06	+0.6	+0.6	+20.2	...		
Sabine Ry	SBR	38.89	57.00	42.86	+1.4	+0.3	+1.4	3.84e		
SanDisk Corporation	SNDK	35.82	62.24	43.20	-3.4	-0.8	+0.4	...		
Schering Plough	SGP	18.38	33.55	33.31	+0.8	+0.2	+40.9	0.26f		
Sears Holdings	SHLD	134.56	195.18	179.33	+7.1	+0.4	+6.8	...		
Service Corp	SCI	7.32	13.89	13.75	-1.0	-0.7	+34.1	0.12		
Southern Co	SO	31.01	38.90	36.63	-5.3	-1.4	-0.6	1.61f		
Starbucks Cp	SBUX	28.03	40.01	28.89	-1.2	-0.4	-18.4	...		
Supervalu Inc	SVU	26.14	47.48	46.96	-0.9	-0.2	+31.4	0.66		
Sybase Inc	SY	19.17	26.50	23.23	+1.7	+0.7	-6.0	...		
Sysco	SY	26.50	37.04	33.22	+3.2	+1.0	-9.2	0.76		
TD Ameritrade Hldg	AMTD	13.30	19.69	19.05	+2.4	+1.3	+17.7	...		
Taiwan Semicon	TSM	7.97	11.64	10.53	-1.3	-1.2	-3.7	0.39f		
Target Corp	TGT	44.70	64.74	58.60	+5.6	+1.0	+2.7	0.48		
3M Company	MMM	67.05	88.05	87.94	+1.6	+0.2	+12.8	1.92		
Titanium Metals	TIE	22.77	40.52	36.21	-1.7	-0.5	+22.7	...		
Toyota Mot	TM	94.52	138.00	120.38	+1.07	+0.9	+10.4	...		
Tyco Intl Ltd	TYC	24.97	33.29	33.18	+5.2	+1.6	+9.1	0.40		
UST Inc	UST	42.60	61.17	54.96	-5.0	-0.9	-5.6	2.40		
Union Pacific	UNP	78.65	121.08	118.90	+3.4	+0.3	+29.2	1.40		
UPS class B	UPS	65.50	83.13	69.98	-1.2	-0.2	-6.7	1.68		
US Bancorp	USB	30.54	36.85	34.37	-0.5	-0.1	-5.0	1.60		
Verizon Comm	VZ	30.69	43.00	42.67	+0.6	+0.1	+14.6	1.62		
Viacom Inc B										