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THE WATERFRONT

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A PUBLICATION OF SUNNYSIDE VALLEY IRRIGATION DISTRICT
 120 South 11th Street ♦ P.O. Box 239 ♦ Sunnyside, WA 98944

BN 59.32 Siphon Wood Stave Pipe Replacement

Sunnyside Valley Irrigation District is replacing the elevated 52" wood stave pipe siphon near Case and McCreadie Roads with a buried 48" fusion welded High-Density Polyethylene (HDPE) pipe. The design of the new siphon takes advantage of the HDPE pipe's fusion welding, which joins the segments together with such durability that the segments act as one long pipe. The pipe will be buried its entire length without any elbow fittings. The pipe is flexible enough to follow the contour of the trench without elbows. The fusion welding has been done on site with a machine that uses heat and pressure to join two pipe segments. The pipe is 860 feet long and is rated at 51 psi.

Siphon 2, the second siphon on the Benton 59.32 Lateral, will have an 85 cfs peak capacity for delivery of irrigation water. The design includes new inlet and outlet structures at each end of the siphon to connect the open lateral with the pipe.

This project started in early November and is expected to be completed in late January, depending on weather and equipment availability. The blasting and fusion welding is contracted work; the remaining work will be completed by the Sunnyside Valley Irrigation District staff.

All irrigators east of the Snipes Creek Wasteway will benefit with this improvement.



Old wood stave pipe



HDPE pipe

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On-Farm Loan Program

The Fall RSBOJC Update detailed the On-Farm Irrigation Conversion Loan Program. The Department of Ecology provides low-interest loan funds to growers who want to convert their rill irrigation to Best Management Practice (BMP) irrigation. BMP methods are drip irrigation, solid set sprinklers, micro-spray, center pivots, or linear moves. The funds can also be used for building pump back systems.

The On-Farm Loan Program offers borrowing a maximum of \$1,200 per acre at a 1% interest rate with a four-year repayment cycle. The yearly payments are included in the landowner's annual irrigation assessments.

These projects ultimately improve the water quality and decrease the quantity of irrigation return flows.

For more information or to apply for the On-Farm Loan, please contact Theresa Johnson, Sunnyside Valley Irrigation District (SVID) at (509) 837-6980 or Wayne Sonnichsen, Roza Irrigation District (RID) Engineer at (509) 837-5141. RSBOJC encourages all landowners currently using rill irrigation to take advantage of the loan program. In recent years, the two Districts have administered approximately \$8.5 million in loans.

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Snipes Canal Lining Project Update

The Snipes canal lining project started in 2003 with 260 feet of concrete lining and continued with 300 feet in 2004. In 2005 Sunnyside Valley Irrigation District will be installing 600 additional feet of lining. The project is located at the Snipes 7.84 delivery where South Hill Road meets the Snipes Canal. The installation of a six-inch drain pipe will remove ground water and avoid frost heaving. It will be placed in a two foot wide by two foot deep bed of drain rock and wrapped in fabric to keep the pipe perforations from becoming plugged. Once the drain is in place, a 30 Mil PVC liner will be placed in the canal to keep water from leaking. Next, an eight ounce fabric material will be placed on the liner giving adherence for the concrete. The last layer will be a two to three inch coating of shotcrete (a mixture of sand and cement) which will protect the liner from damage and help in maintaining the shape of the canal. The shotcrete will be applied with a machine which pumps it through a large diameter hose and sprays under pressure.

The size of the canal is eleven feet across the bottom with nine and a half foot sloping sides.

Project materials are:

- 22,400 square feet of 30 Mil PVC liner
- 28,800 square feet of 8 ounce fabric
- 100 cubic yards of drain rock
- 225 cubic yards of shotcrete
- 600 feet of 6" perforated drain pipe



2004 gluing the liner sections



2004 concrete application to liner



2005 Snipes Lateral 7.84 bank preparation

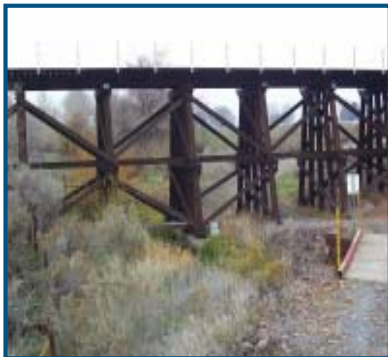
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Environmental Portable Vacuum Sampler

Have you seen this corrugated steel drum along a drain or wasteway and wondered its purpose? The protective drum holds a bright yellow portable vacuum sampler. This sampler can be programmed to pull up to 24 water samples and deposit them into the bottles within its housing. The Water Quality staff deploys the sampler to gain turbidity samples before and during construction and drain cleaning projects. The turbidity samples are collected around the clock to monitor the amount of sediment in the wasteway.

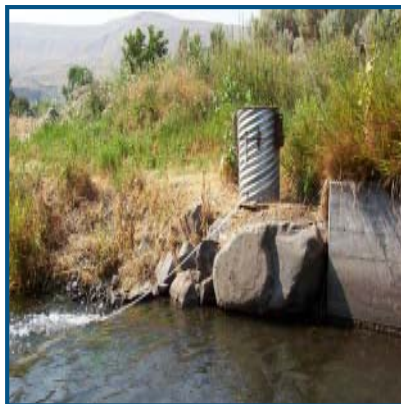
The State of Washington, Department of Ecology has set 25 NTU as the goal for drain water entering the Yakima River. Nephelometric Turbidity Unit is the measurement for turbidity in the water. The samples are analyzed at the RSBOJC water quality laboratory. With the data from the sampler, RSBOJC can show compliance with state requirements. Please do not disturb the sampler; it's working for all of us.

Sampler



Sampler deployed at Snipes Creek Wasteway

Sampler deployed at Spring Creek Wasteway



Washington State Water Resource Association Awards Pat Bailey The 2005 Leadership Award

Pat Bailey, Assistant Manager – Administration at Sunnyside Valley Irrigation District, received the prestigious Washington State Water Resources Association (WSWRA) Water Leadership Award at the association's annual conference in Spokane, on December 2. She was also presented with a framed certificate of appreciation from the Board of Directors for her many years of service to the Washington State Water Resources Association.

Pat started her career at SVID on January 12, 1976 as an assistant to the bookkeeper. Within 10 years she was promoted to Office Manager and Assistant Secretary for the Board. She presently holds the title of Sunnyside Valley Irrigation District Assistant Manager – Administration.

Pat's leadership has been consistently recognized and utilized. She was elected to the board of directors of WSWRA – the only woman to have that distinction. She served as president of our association, the first and only woman to have that responsibility and honor. She has been a dependable and sought after presence on the audit committee for the past 20 years.

Pat has also been the Secretary / Treasurer of the Yakima Basin Joint Board for the past several years as well as the Treasurer of the Roza-Sunnyside Board of Joint Control.

Pat will retire in February 2006.

Water Storage Update

System storage is a little over 45% of average or about 220,000 AF. Precipitation for the period October 1st to December 28th is 75.5 inches or 88% of average for the water year to date. The NRCS Snotel sites for the Upper Yakima basin are reporting 73% of average and the Lower basin are reporting 88% of average.

With the exception of early to mid December, we have had a good start on precipitation and snow pack; with continued precipitation and snow pack we will be in fine shape for the 2006 irrigation season.

For current information go to URL address:
www.usbr.gov/pn/hydromet/yakima/yaktea.html



Check Structure 40.38

The Sunnyside Main Canal will have a new check structure, with an automated gate, at Canal Mile 40.38. The SCADA automation will allow the gate to be monitored and controlled from the SVID office. The check structure utilizes a single 18 foot wide dual leaf overshot gate. An overshot gate is one where the water is designed to flow over the top of the gate. While the check structure is on Beat 7, this project is for the overall management of water flow through the Sunnyside Canal. The photos show the sheet piles being driven into the ground. These sheet piles are designed to prevent seepage under the concrete check structure. The anticipated completion of the concrete check structure, electric sensing devices and cat walk is late March 2006.



The Sunnyside Valley Irrigation District publishes **THE WATERFRONT** biannually for land-owners. All articles, letters and other items submitted to Sunnyside Valley Irrigation District (SVID) for use in SVID's landowner newsletter become the property of SVID which is authorized to use any item submitted, without payment or compensation to the person submitting the item, in any newsletter or other publication of SVID. SVID reserves the right to edit all items submitted. Douglas Simpson, Chairman. Robert Golob, Dave Michels, John Newhouse, Mike Hogue, Directors. Officers: James W. Trull, District Manager; Donald Schramm, Assistant Manager; Patricia Bailey, Secretary-Treasurer. Address comments to: Elaine Brouillard, Editor, P.O. Box 239, Sunnyside, WA 98944.

Sunnyside Canal Improvement Update

Sunnyside Canal Improvement Project (SCIP) is the result of a settlement agreement between the United States Bureau of Reclamation (Reclamation), Washington State Department of Ecology (WDOE), Yakima Nation, and Sunnyside Division Board of Control (SDBOC) in the Yakima Basin Water Rights Adjudication. Under the agreement, Sunnyside will reduce its annual diversion by 19,450 acre-feet (two-thirds) to benefit in stream flows and will retain 9,712 acre-feet (one-third) annually to improve the availability of water supplies for irrigation. The project is expected to cost about \$32.6 million over a 9-year period. Reclamation funds will cover 65% of total project costs with WDOE and SVID each picking up 17.5% of the costs.

Some of the major components of this project will include:

- Replacement of 30 existing check structures with fully automated, electrically powered gates used to maintain a consistent water elevation in the canal for deliveries of irrigation water. Three to date have been done. This winter four are under construction.
- A SCADA system communicating between the central office and all automated control sites will coordinate the flow of water throughout the 60-mile Sunnyside Canal.
- Construction of three re-regulation reservoirs; the first placed northeast of Prosser, the second north of Granger and the third north of Sunnyside. These reservoirs will have a capacity ranging from 300-500 acre-feet with a maximum depth of 25 feet.

The first re-regulation reservoir, Mile 59.29 near Prosser, achieved first fill on July 11, 2005. The second re-regulation facility, Mile 23.7, is scheduled for construction north of Granger. It is in the design stage and construction will begin the winter of 2007 and continue through the summer of 2008. Mile 23.7 will be operational approximately the middle of the 2008 irrigation season.



Improvements on Lateral 59.28

Improvements have been made along French and Hess Roads on the 59.28 for deliveries 21-29 and 59.28 E deliveries 1-3. Sunnyside Valley Irrigation District has designed and laid 8,700 feet of PVC pipe, ranging from sizes of 18, 15, 12, 10, 8 and 6 inches. A total of 11 deliveries have 3" to 8" flow meters. Sunnyside Valley Irrigation District replaced concrete pipes and the open ditch gravity system with a pressurized PVC system. This new portion of the 59.28 has approximately 50-55 PSI pressure at the end of the system. This year another 350 acres have been improved from a gravity flow system to a pressurized piped system.

