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## ***Couse/Tenmile Creeks Watershed Project Implementation***

January 2007 – December 2007 Conservation Projects

### Cooperators:

Bonneville Power Administration  
Asotin County Conservation District  
Washington State Conservation Commission  
Washington State Department of Fish and Wildlife  
Washington Department of Ecology  
Natural Resources Conservation Service  
United States Forest Service, Pomeroy Ranger District  
Asotin County Road Department  
Landowners of Asotin County

**Report for Project 2002-050-00  
Contract 30656**

Province: Blue Mountain  
Subbasin: Asotin Creek

## January 2007 thru December 2007 Habitat Projects Completed

Prepared for:

U.S. Department of Energy  
Bonneville Power Administration  
Environment, Fish and Wildlife Division

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Asotin County in SE Washington

## ***Table of Contents***

Table of Contents .....	3
Introduction .....	4
Asotin County Watershed History .....	5
BPA Budget Summary .....	6
Project Summary.....	7
Project 2006-12 .....	7
Project 2006-23 .....	8
Project 2006-28 .....	8
Project 2006-34 .....	9
Project 2006-37 .....	9
Project 2007-2 .....	10
Project 2007-3 .....	10
Project 2007-7 .....	10
Project 2007-7 .....	11
Project 2007-9 .....	11
Project 2007-15 & 2007-16.....	12
Project 2007-21 .....	12
Project 2007-23 .....	13
Project 2007-25 & 2007-26.....	13
Project 2007-27 .....	14
Project 2007-32 .....	14
Project 2007-33 .....	14
Project 2007-33 .....	15
Project 2007-34 .....	15
Project 2007-36 .....	16
Project 2007-39 .....	17
Six-Year Direct Seed Program .....	17
Riparian Restoration Lease .....	18
Rangeland Restoration Project.....	19
Report Conclusion.....	20

## ***Introduction***

The Asotin County Conservation District (ACCD) is the primary entity coordinating habitat projects on private lands within Asotin County watersheds.

The Tenmile Creek watershed is a 42 square mile tributary to the Snake River, located between Asotin Creek and the Grande Ronde River. Couse Creek watershed is a 24 square mile tributary to the Snake River, located between Tenmile Creek and the Grande Ronde River. Both watersheds are almost exclusively under private ownership. The Washington Department of Fish and Wildlife has documented wild steelhead and rainbow/redband trout spawning and rearing in Tenmile Creek and Couse Creek. The project also provides Best Management Practice (BMP) implementation throughout Asotin County, but the primary focus is for the Couse and Tenmile Creek watersheds.

The ACCD has been working with landowners, Bonneville Power Administration (BPA), Washington State Conservation Commission (WCC), Natural Resource Conservation Service (NRCS), Farm Service Agency (FSA), Salmon Recovery Funding Board (SRFB), Washington Department of Fish and Wildlife (WDFW), U.S. Forest Service, Pomeroy Ranger District (USFS), Nez Perce Tribe (NPT), Washington Department of Ecology (DOE), National Marine Fisheries Service (NOAA Fisheries), and U.S. Fish and Wildlife Service (USFWS) to address habitat projects in Asotin County.

The Asotin Subbasin Plan identified priority areas and actions for ESA listed streams within Asotin County. Couse Creek and Tenmile Creek are identified as protection areas in the plan. The Conservation Reserve Enhancement Program (CREP) has been successful in working with landowners to protect riparian areas throughout Asotin County. Funding from BPA and other agencies has also been instrumental in protecting streams throughout Asotin County by utilizing the ridge top to ridge top approach.

## ***Asotin County Watershed History***

Historically Tenmile and Couse creeks were important tributaries to the Snake River for steelhead and were utilized by the NPT for herbs, wildlife and fishing. Tribal members would cross the Snake River and use these tributaries as corridors to hunting and fishing grounds located on the Grande Ronde River.

A formal limiting factors analysis has not been completed for Tenmile and Couse creeks, however, local technical consensus and the *Asotin Subbasin Plan's* goals and objectives for fish have been utilized to identify limiting factors for these two watersheds. Since these two streams are similar to Asotin Creek in all aspects, excluding the large acreage of state and federal ownership found in the Asotin Creek watershed, technical consensus has identified temperature, sediment, and lack of suitable habitat for adults and juveniles to be limiting factors in salmonid production. (Glen Mendel, WDFW Personal Communication, 2001) Recently, the ACCD has worked with WDFW to identify spawning and rearing steelhead in both of these streams resulting in habitat projects becoming a priority. These runs of steelhead are of wild origin and hatchery fish have never been released into these two streams. (Cursory Assessments of Salmonids and their Habitats in George, Tenmile, and Couse Creeks in Asotin County, 2000, Mendel, G). Positive past BPA, SRFB, DOE, and WA State Conservation Commission habitat funding and working relationships with watershed residents and interested parties have resulted in projects being completed to address factors limiting salmonids.

Located in Water Resource Inventory Area (WRIA) # 35, the highest priority WRIA in southeastern Washington according to WDFW's "At-Risk Stock Significance Map," Asotin County Watersheds is part of the Governor's Snake River Salmon Recovery Region. ESA listed stocks of summer steelhead, bull trout and spring Chinook utilized the watershed, along with resident rainbow trout. Indigenous anadromous fish species most actively targeted for management are summer steelhead, bull trout, and spring Chinook salmon. The goals for these species are to restore sustainable, naturally producing populations to support tribal and non-tribal harvest and cultural and economic practices while protecting the biological integrity and genetic diversity of these species in the watershed. The broad general strategies used to achieve the habitat objectives include protecting and restoring prioritized habitat through the use of in-stream, riparian, and upland best management practices.

# ***BPA Budget Summary***

## **Administrative Expenditures**

BPA funding was used for employee salaries and benefits, travel, and goods and services needed for the administration of the cost-sharing programs. The following summary reflects those expenses.

Wages & Benefits	\$ 20,572.19
Travel	\$ 1,084.93
Office Lease	\$ 4,500.00
<b>TOTAL</b>	<b>\$ 26,157.12</b>

## **Project Expenditures**

BPA funding was used for BMP cost-share programs. The matching funds include costs associated with projects that were paid for by other funding sources and landowners. The following summary reflects those expenses.

	<b>BPA Funding</b>	<b>Matching Funds</b>	<b>Totals</b>
Environmental Compliance	\$ 5,000.00	\$ -	\$ 5,000.00
Riparian/Protection Fencing	\$ 11,577.68	\$ 25,096.62	\$ 36,674.30
Riparian Planting	\$ 7,663.36	\$ 15,969.44	\$ 23,632.80
Riparian Tree Watering & Protection	\$ 18,156.39	\$ -	\$ 18,156.39
Upland Erosion Control	\$ 19,989.42	\$ 34,643.32	\$ 54,632.74
Direct Seed	\$ 4,270.78	\$ 7,837.16	\$ 12,107.94
Farmland Conversion	\$ 6,148.79	\$ 47.40	\$ 6,196.19
Cross Fencing	\$ 6,460.69	\$ 18,627.56	\$ 25,088.25
Alternative Water Developments	\$ 127,908.77	\$ 76,683.89	\$ 204,592.66
<b>TOTALS</b>	<b>\$ 207,175.88</b>	<b>\$ 178,905.39</b>	<b>\$ 386,081.27</b>

\*The matching funds shown above only reflect match for projects implemented using BPA funds, not all District funding.

## ***Project Summary***

The Asotin County Conservation District works with private landowner to implement natural resource conservation projects by installing best management practices (BMPs). Landowners retain control of the property however BMPs must be maintained for the life of the project. This project provided funding for 23 projects including 91 BMPs that were implemented throughout Asotin County to conserve natural resources. Funding was also provided for the six-year direct seed program.

<b>Project Activity</b>	<b>Performance Completed</b>
Environmental Compliance	2 cultural resource surveys
Riparian/Protection Fencing	11,469 feet installed
Riparian Planting	3,000 trees purchased for 2008 planting, 1255 trees planted, 4.2 acres critical area and 6,221 sy of fabric mulch and 1 acre of drip irrigation
Riparian Tree Watering & Protection	5,316 trees watered & protected
Alternative Water Developments	3 well, 2 spring collections, 4 pumps, 3 storage tanks, 24 troughs, 10 hydrants, 27,181' pipeline, and 9 acres of critical area planting
Upland Erosion Control	1 sediment basin, 3 ponds, 7,450' of terrace and 90 of acres rangeland restoration
Direct Seed	153.2 acres seeded
Farmland Conversion	63.9 acres seeded
Weed Control	49 acres
Cross Fencing	7,057 feet installed

### **Project 2006-12**

This water development project was installed to ensure livestock had adequate water in the pasture, since the landowner enrolled in CCRP (Continuous Conservation Reserve Program), which eliminates livestock access to the streams.

<b>Best Management Practice</b>	<b>Units Completed</b>	<b>BPA Cost-Share</b>	<b>Matching Funds</b>	<b>Total Cost</b>
Pipeline	150 Feet	\$ 562.50	\$ 187.50	\$ 750.00
Trough	1 Trough (700 gallons)	\$ 1,229.49	\$ 409.83	\$ 1,639.32
<b>Total</b>		<b>\$ 1,791.99</b>	<b>\$ 597.33</b>	<b>\$ 2,389.32</b>



## Project 2006-23

This Farmland Conversion project was implemented to convert cropland to pasture/hayland. Pasture/hayland planting establishes native and introduced forage species and is used to reduce soil erosion and improve water quality by providing a permanent cover.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Farmland Conversion	32.3 Acres	\$ 2,672.79	\$ -	\$ 2,672.79
<b>Total</b>		<b>\$ 2,672.79</b>	<b>\$ -</b>	<b>\$ 2,672.79</b>



## Project 2006-28

Springs and wells are developed to provide water for livestock. Watering facilities, including troughs, tanks and pipeline are installed to provide an alternative source of water for livestock. Alternative water sources reduce livestock impacts on the riparian area and fish and wildlife habitat, improve water quality, protect and enhance vegetative cover through proper grazing distribution, and provide erosion control through better grassland management.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Spring Collection	1 Spring	\$ 750.00	\$ 5,497.72	\$ 6,247.72
Pipeline	140 Feet	\$ 473.20	\$ 849.71	\$ 1,322.91
Trough	1 Trough (658 gallons)	\$ 987.00	\$ 565.66	\$ 1,552.66
<b>Total</b>		<b>\$ 2,210.20</b>	<b>\$ 6,913.09</b>	<b>\$ 9,123.29</b>

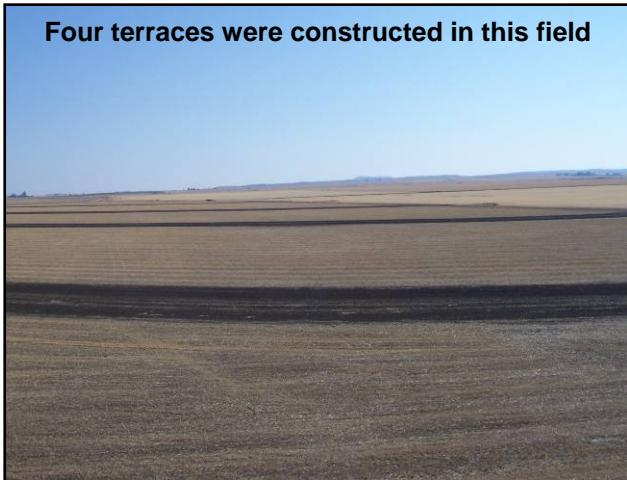




## Project 2006-34

This terrace project was implemented to reduce soil erosion and retain runoff for moisture conservation. This project was a partnership between the District cost-share program, the NRCS Environment Quality Incentive Program and the landowner.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Terrace	7450 Feet	\$ 359.42	\$ 667.50	\$ 1,026.92
<b>Total</b>		<b>\$ 359.42</b>	<b>\$ 667.50</b>	<b>\$ 1,026.92</b>



## Project 2006-37

This sediment basin project was designed to reduce soil erosion from a field by collecting and storing sediment. This project was partnered with the NRCS Environmental Quality Incentive Program.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Sediment Basin	1 Basin (247 cubic yards)	\$ 140.00	\$ 260.00	\$ 400.00
<b>Total</b>		<b>\$ 140.00</b>	<b>\$ 260.00</b>	<b>\$ 400.00</b>



## Project 2007-2

This project provided a windbreak for a livestock feeding area, which was partnered with funds from the NRCS Wildlife Habitat Incentive Program. The cross fence will improve livestock distribution and utilization of rangeland and funding was also provided by the NRCS Environmental Quality Incentive Program.

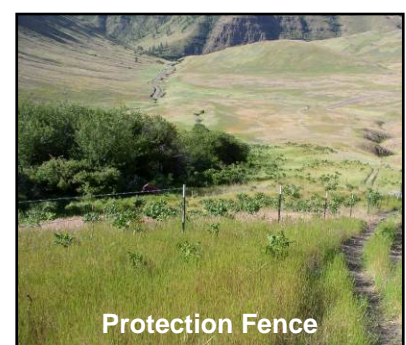
Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Cross Fence	1555 Feet	\$ 13.69	\$ 5,817.56	\$ 5,831.25
Fabric Mulch	1184 Sq. Yards	\$ 621.60	\$ 1,154.40	\$ 1,776.00
Drip Irrigation	1 Acre	\$ 420.00	\$ 809.65	\$ 1,229.65
Tree Planting	150 Trees	\$ 64.13	\$ 192.37	\$ 256.50
<b>Total</b>		<b>\$ 1,119.42</b>	<b>\$ 7,973.98</b>	<b>\$ 9,093.40</b>



## Project 2007-3

Two springs were developed and a cross fence was installed to improve pasture utilization. Funding for this project was provided by the District's cost-share program (BPA, WSCC and DOE) and landowner inkind.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Spring Box & Collection	2 Springs	\$ -	\$ 2,144.00	\$ 2,144.00
Trough	2 Troughs (1400 gallons)	\$ -	\$ 2,915.84	\$ 2,915.84
Pipeline	250 Feet	\$ -	\$ 804.00	\$ 804.00
Tree Planting	130 Trees	\$ -	\$ 275.75	\$ 275.75
Protection Fence	2400 Feet	\$ 3,364.80	\$ 5,035.20	\$ 8,400.00
Cross Fence	2850 Feet	\$ 2,137.50	\$ 7,837.50	\$ 9,975.00
<b>Total</b>		<b>\$ 5,502.30</b>	<b>\$ 19,012.29</b>	<b>\$ 24,514.59</b>



## Project 2007-7

This water development project was installed to provide adequate water for livestock, which will improve water quality, enhance vegetative cover through proper grazing distribution, and provide erosion control through better pasture management.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Spring Collection	3 Springs	\$ 3,375.00	\$ 1,291.56	\$ 4,666.56
Trough	2 Troughs (1200 gallons)	\$ 2,256.00	\$ 810.94	\$ 3,066.94
Pipeline	1200 Feet	\$ 4,500.00	\$ 1,559.85	\$ 6,059.85
Protection Fence	800 Feet	\$ 1,395.98	\$ 465.32	\$ 1,861.30
Critical Area Planting	3 Acres	\$ 138.75	\$ 138.75	\$ 277.50
<b>Total</b>		<b>\$ 11,665.73</b>	<b>\$ 4,266.42</b>	<b>\$ 15,932.15</b>



## Project 2007-9

This windbreak project reduces wind erosion and provides wildlife habitat. The windbreak includes fabric mulch to reduce competition from weeds and fence to protect it from livestock. Funding was provided through the District cost-share program (BPA and WSCC), NRCS's Environmental Quality Incentive Program and landowner in-kind.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Protection Fence	6663 Feet	\$ 1,998.90	\$ 17,990.10	\$ 19,989.00
Fabric Mulch	5037 Sq. Yards	\$ 1,133.33	\$ 10,199.92	\$ 11,333.25
Critical Area Planting	4.2 Acres	\$ 24.30	\$ 656.10	\$ 680.40
Tree Planting	975 Trees	\$ -	\$ 2,681.25	\$ 2,681.25
<b>Total</b>		<b>\$ 3,156.53</b>	<b>\$ 31,527.37</b>	<b>\$ 34,683.90</b>



## Project 2007-15 & 2007-16

This Farmland Conversion project was implemented to convert cropland to pasture/hayland. Pasture/hayland planting establishes native and introduced forage species and is used to reduce soil erosion and improve water quality by providing a permanent cover.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Farmland Conversion	31.6 Acres	\$ 3,476.00	\$ 47.40	\$ 3,523.40
<b>Total</b>		<b>\$ 3,476.00</b>	<b>\$ 47.40</b>	<b>\$ 3,523.40</b>



## Project 2007-21

A pipeline was installed to provide reliable water to the pasture and reduce livestock concentration near the riparian area. This will reduce the impact on the riparian area and increase pasture utilization.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Pipeline	13,530 Feet	\$ 11,278.36	\$ 3,759.45	\$ 15,037.81
Trough	3 Troughs (1800 gallons)	\$ 1,498.50	\$ 499.50	\$ 1,998.00
<b>Total</b>		<b>\$ 12,776.86</b>	<b>\$ 4,258.95</b>	<b>\$ 17,035.81</b>



## Project 2007-23

A well was drilled to provide reliable water for multiple pastures and eliminate livestock access to an ESA listed stream and improve pasture utilization. Funding for this project was provided by the District cost-share program (BPA and WSCC) and landowner inkind.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Well	1 Well	\$ 7,500.00	\$ 3,872.90	\$ 11,372.90
Pumping Plant	1 Pump	\$ -	\$ 5,007.75	\$ 5,007.75
Pipeline	1200 Feet	\$ -	\$ 2,358.71	\$ 2,358.71
Trough	1 Trough (600 gallons)	\$ -	\$ 995.40	\$ 995.40
<b>Total</b>		<b>\$ 7,500.00</b>	<b>\$ 12,234.76</b>	<b>\$ 19,734.76</b>



## Project 2007-25 & 2007-26

This water development project was installed to provide adequate water for livestock, which will improve water quality, enhance vegetative cover through proper grazing distribution, and provide erosion control through better pasture management.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Spring Collection	1 Spring	\$ 884.40	\$ 294.80	\$ 1,179.20
Pipeline	458 Feet	\$ 1,621.80	\$ 1,958.68	\$ 3,580.48
Trough	2 Troughs (1638 gallons)	\$ 2,331.60	\$ 777.20	\$ 3,108.80
Protection Fence	746 Feet	\$ 2,238.00	\$ 746.00	\$ 2,984.00
<b>Total</b>		<b>\$ 7,141.80</b>	<b>\$ 3,710.68</b>	<b>\$ 10,852.48</b>



## Project 2007-27

This cross fence will manage animal access and grazing pressure on a particular area. It enables livestock to more efficiently utilize the pasture, resulting in healthier range conditions.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Cross Fence	2652 Feet	\$ 4,309.50	\$ 4,972.50	\$ 9,282.00
<b>Total</b>		<b>\$ 4,309.50</b>	<b>\$ 4,972.50</b>	<b>\$ 9,282.00</b>



## Project 2007-32

A well was drilled to provide water to a pasture where none otherwise existed. This will allow livestock to use the pasture, resulting in improved range conditions.

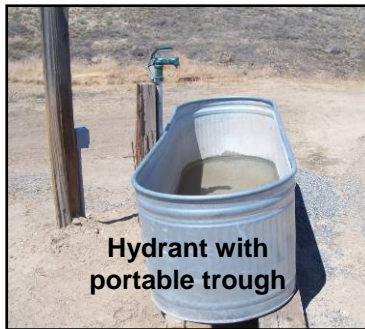
Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Well	1 Well	\$ 7,500.00	\$ 8,890.99	\$ 16,390.99
Pumping Plant	1 Pump	\$ 3,128.93	\$ 1,042.98	\$ 4,171.91
Pipeline	1500 Feet	\$ 1,527.60	\$ 509.20	\$ 2,036.80
Trough	1 Trough (982 gallons)	\$ 927.28	\$ 938.18	\$ 1,865.46
<b>Total</b>		<b>\$ 13,083.81</b>	<b>\$ 11,381.35</b>	<b>\$ 24,465.16</b>



### Project 2007-33

This project provides an alternative water source to pasture allowing better pasture utilization and eliminates livestock access to springs and a pond, improving water quality.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Storage Tank	1 Tank	\$ 3,710.74	\$ 1,236.91	\$ 4,947.65
Pumping Plant	1 Pump	\$ 1,515.54	\$ 505.18	\$ 2,020.72
Pipeline	878 Feet	\$ 3,292.50	\$ 1,190.17	\$ 4,482.67
Frost Free Hydrants	1 Hydrant	\$ 63.75	\$ 49.64	\$ 113.39
<b>Total</b>		<b>\$ 8,582.53</b>	<b>\$ 2,981.90</b>	<b>\$ 11,564.43</b>



### Project 2007-34

This water development project provides reliable water for livestock and improves the utilization of the feeding areas. There is no livestock access to the Snake River and animals can be rotated through holding pens to reduce the impact on any one feed area.

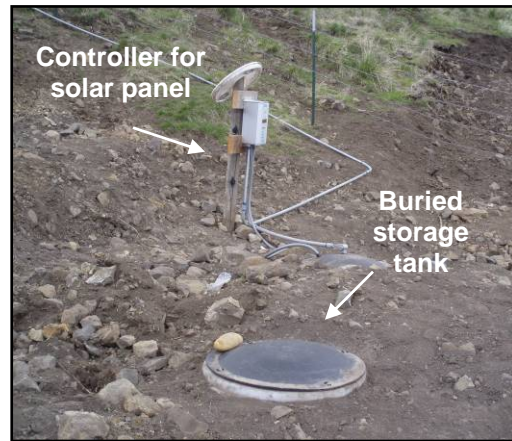
Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Well	1 Well	\$ 6,601.93	\$ 2,200.64	\$ 8,802.57
Pumping Plant	1 Pump	\$ 2,946.80	\$ 982.26	\$ 3,929.06
Frost Free Trough	6 Troughs	\$ 8,973.86	\$ 2,991.29	\$ 11,965.15
Frost Free Hydrants	4 Hydrants	\$ 232.47	\$ 77.49	\$ 309.96
Pipeline	1300 Feet	\$ 3,482.55	\$ 1,160.85	\$ 4,643.40
<b>Total</b>		<b>\$ 22,237.61</b>	<b>\$ 7,412.53</b>	<b>\$ 29,650.14</b>



## Project 2007-36

This water development project was installed to ensure livestock had adequate water in multiple pastures. The landowner has enrolled the streams on his property in CREP (Conservation Reserve Enhancement Program) and CCRP (Continuous Conservation Reserve Program), which eliminates livestock access to the streams. The location of this development is on the ridge top, which encourages livestock to utilize adjacent pasture or rangeland more evenly and efficiently rather than staying in the bottom near the stream.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Pumping Plant	1 Pump	\$ 3,750.00	\$ 4,115.33	\$ 7,865.33
Storage Tank	2 Tanks	\$ 7,500.00	\$ 2,739.08	\$ 10,239.08
Troughs	5 Troughs (3500 gallons)	\$ 6,580.00	\$ 2,218.81	\$ 8,798.81
Frost Free Hydrants	5 Hydrants	\$ 423.79	\$ 141.26	\$ 565.05
Pipeline (Plastic)	5130 Feet	\$ 19,099.92	\$ 6,366.64	\$ 25,466.56
Pipeline (Steel)	1445 Feet	\$ 6,955.88	\$ 2,318.62	\$ 9,274.50
Protection Fence	860 Feet	\$ 2,580.00	\$ 860.00	\$ 3,440.00
Critical Area Planting	6 Acres	\$ 308.63	\$ 308.62	\$ 617.25
<b>Total</b>		<b>\$ 47,198.22</b>	<b>\$ 19,068.36</b>	<b>\$ 66,266.58</b>





## Project 2007-39

This pond project was designed to reduce soil erosion and provide a watering source for livestock and wildlife. This project was partnered with the NRCS Environmental Quality Incentive Program.

<b>Best Management Practice</b>	<b>Units Completed</b>	<b>BPA Cost-Share</b>	<b>Matching Funds</b>	<b>Total Cost</b>
Multi Purpose Pond	3 Ponds (940 cubic yards)	\$ 990.00	\$ 1,410.00	\$ 2,400.00
<b>Total</b>		<b>\$ 990.00</b>	<b>\$ 1,410.00</b>	<b>\$ 2,400.00</b>



## Six-Year Direct Seed Program

Direct seed and no-till are a set of innovative farming practices designed to increase the amount of time that farmland has vegetative cover and to reduce the amount of soil disturbance, while still producing crops. These methods have been shown to be very effective in reducing the amount of sediment introduced into salmonid bearing streams. Minimum tillage farming involves limited disturbance of the soil using equipment that leaves much of the vegetative cover or crop residue on the surface. Landowners participating in the program only receive a cost-share payment on years that seeding takes place. Three landowners received cost-share for seeding a total of 153.2 acres. Additional acres were protected but did not receive a payment since they were in a chem. fallow rotation.



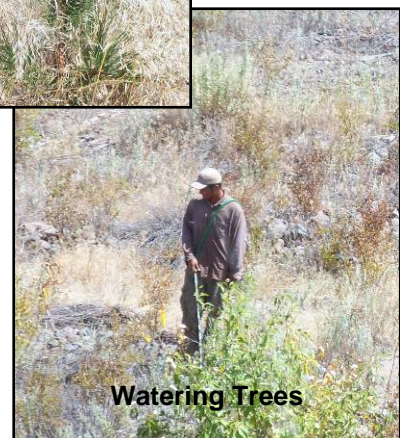
## Riparian Restoration Lease

The Riparian Restoration Lease is a project modeled after CREP (Conservation Reserve Enhancement Program), which enrolled 49 acres in a 15-year riparian lease on Couse Creek. This project has resulted in the lower 6.25 contiguous miles of Couse Creek being protected. The project requires the acres be fenced and native trees, shrubs and grass planted and a water development was established for livestock. CREP provides five years of paid maintenance for all practices associated with the project, however this agreement only provides maintenance assistance for the tree watering, protection and replanting and allowed for 100% cost-share on noxious weed control. The landowner pays for any maintenance on the fence or water development.

Due to the harsh environmental conditions, including shallow soil, low rainfall and high summer temperatures, there is often a high mortality rate for new plantings. The District had the opportunity to water trees for the second summer. Our goal was to increase survivability during the first few years following planting. Trees were watered twice a week due to the site location and the condition of the trees. There will be an additional 3,000 trees planted in 2008 that were purchased this year.

Weed control is essential for survival and growth of grass, trees and shrubs in the riparian buffer. Invading weeds can out compete the native grass and tree and shrub seedlings by depriving them of water, light, and space. This is the third year of weed control.

Best Management Practice	Units Completed	BPA Cost-Share	Matching Funds	Total Cost
Trees (Will be planted in 2008)	3000 Trees	\$ 5,400.00	\$ -	\$ 5,400.00
Tree Watering & Protection	5316 Trees	\$ 18,156.39	\$ -	\$ 18,156.39
Weed Control	49 Acres	\$ 2,891.00	\$ -	\$ 2,891.00
<b>Total</b>		<b>\$ 26,447.39</b>	<b>\$ -</b>	<b>\$ 26,447.39</b>



## Rangeland Restoration Project

In July of 2007, the Rockpile Creek Fire that was unintentionally started at the Rockpile Creek trailhead along Cloverland Road consumed over 17,000 acres of land in the Asotin Creek drainage area. As a result of the severity and frequency of the fire that occurred in the steep canyons, a study plan was developed. The study will examine the potential of livestock grazing as an effective seed-bed preparation technique in forage plant reseeding projects, and the success of plant seeding combined with prescribed grazing on noxious weed control and erosion prevention in arid rangeland following fire. Two sites, totaling 90 acres, located on privately owned land, historically used for cattle grazing, were chosen and the study was implemented beginning in December of 2007.

Burned fencing was replaced and new fencing was installed in order to establish mitigation enclosure areas. Aerial seeding of study sites was done by helicopter. Following seeding, cattle were moved onto the sites and are fed hay daily. Round bales are unloaded at the top of steep slopes and allowed to unroll down hill. The utilization of the hoof action of feeding cattle in conjunction with the mulching effect of hay residue is being monitored for the facility to produce suitable medium for seedling germination, establishment and growth in this environment. After plant stand establishment, the enclosure areas will not be grazed for a period of 2 years. Following the two-year rest period, a 5-year prescribed grazing program will be followed. Prescribed grazing management practices including frequency of grazing, intensity and timing of grazing, and duration of grazing will be adjusted based on pasture growth rate and will be closely monitored.

	<b>BPA Cost-Share</b>	<b>Matching Funds</b>	<b>Total Cost</b>
Grass Seed Mix	\$ 6,661.18	\$ 907.82	\$ 7,569.00
Aerial Grass Seed Application	\$ 1,620.00	\$ -	\$ 1,620.00
ATV Grass Seed Application	\$ -	\$ 800.00	\$ 800.00
Fencing	\$ 7,868.00	\$ 25,207.00	\$ 33,075.00
Herbicide & Application	\$ 935.00	\$ 2,391.00	\$ 3,326.00
Monitoring	\$ 1,415.82	\$ -	\$ 1,415.82
Weed Board Oversight	\$ -	\$ 3,000.00	\$ 3,000.00
<b>Total</b>	<b>\$ 18,500.00</b>	<b>\$ 32,305.82</b>	<b>\$ 50,805.82</b>



## ***Report Conclusion***

This report describes the activities and associated costs for the Asotin County Conservation District from January 2007 through December 2007. Funding allocated to Asotin County Conservation District from BPA has been utilized to improve natural resource conservation. Additional project funding was provided through the Washington State Department of Ecology, Washington State Conservation Commission, Salmon Recovery Funding Board, and volunteer landowners to implement Best Management Practices. The habitat in Asotin County is being improved due to the commitments made by funding sources, partnering agencies, and landowners. The Asotin County Conservation District will continue its efforts to enhance and restore habitat for fish and wildlife within the District boundaries.