



Hood River Watershed Group FY09-11 Biennial Report

***Submitted to the Oregon Watershed Enhancement Board,
and Hood River Watershed Group Membership,
Covering the Period July 1, 2009 through June 30, 2011***

***OWEB Project No. 210-043
Submitted By Steve Stampfli, HRWG Coordinator
August 11, 2011***

1. General Description of Coordinator and Watershed Council Work Activities

The Hood River Watershed Group (HRWG) completed its 17th and 18th years of organization during the reporting period July 1, 2009 through June 30, 2011. A variety of watershed group coordination, assessment, planning, education, technical assistance and on-ground restoration activities were conducted during the 24 month term. These activities were made possible via \$213,763.52 in support funding from OWEB (\$99,600), Farmers Irrigation District (\$12,500), Middle Fork Irrigation District (\$14,000), East Fork Irrigation District (\$14,000), Hood River Soil and Water Conservation District (\$1,717.52) and the Confederated Tribes of the Warm Springs Reservation Oregon (\$72,000). Additionally, \$72,200 in assorted in-kind labor, equipment, services and material donations was recorded during the biennium. Of this, \$54,240 was attributable to donated volunteer time.

The most important result of the Hood River Watershed Coordinator's efforts was continued operation and expansion of the Hood River Watershed Group and its functions. Work performed by HRWG staff and membership was aimed at achieving the group's mission "to sustain and improve the Hood River watershed through education, cooperation and stewardship".

The remainder of this report includes items required by the OWEB grant agreement for the period, including:

- Report of final project cost by budget category,
- Record of implemented restoration projects funded by OWEB and others,
- Record of implemented education, outreach, assessment and monitoring activities,
- Annual reporting to local natural resource agency partners, and annual briefing to Hood River Board of Commissioners,
- Copy of HRWG annual work plan,
- Copy of council self-improvement plan.

2. Final Project Costs by Budget Category

Budget Category	A	B	C	D	E	F
	OWEB Council Support Grant	Non-OWEB Cash	Source	In-kind Contributions Volunteer Value	Source	Total
Coordinator	88,600.00	11,084.65	Confederated Tribes of Warm Springs (CTWS)			11,084.65
Operating Costs	0.00	728.52	Hood River SWCD			728.52
		14,000.00	East Fork ID			14,000.00
		14,000.00	Middle Fork ID			14,000.00
		12,500.00	Farmers ID			12,500.00
		60,915.35	CTWS			60,915.35
				54,240.00	HRWG volunteer labor	54,240.00
				17,960.00	HRWG in-kind service & equipment	17,960.00
Risk Management	2,000.00	935.00	Hood River SWCD			935.00
Fiscal Administration	9,000.00					0.00
Biennial Totals	99,600.00	114,163.52		72,200.00		186,363.52

Total Overall Project Costs	\$285,963.52	(Total dollar value of OWEB & Non-OWEB Cash, In-Kind Contributions and Volunteer value ALL added together.)
Total Non-OWEB Funds	\$186,363.52	(Total dollar value of Non-OWEB Cash, In-Kind Contributions and Volunteer value ALL added together.)
OWEB Match	\$186,363.52	(What dollar value of the Total Non-OWEB Funds are you claiming as OWEB Match. You are required to show a minimum of 25% of the total actual OWEB cash contributions. You may show more than 25%.)

3. List of Implemented Restoration Projects

On-ground restoration actions that directly address identified limiting factors will ultimately define the success of the Hood River Watershed Group. The group concentrates on directed activities that clean-up and conserve water, restore fish passage and habitat, and repair other diminished watershed functions. The following is a list of some of the more notable restoration accomplishments during the biennium:

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
1) <u>PacifiCorp Powerdale Dam Removal</u> / 210-043 (CS) / PacifiCorp	In 2010, the HRWG joined PacifiCorp, agencies and other entities in the successful removal of the 87 year-old Powerdale Hydroelectric Project on the lower Hood River. Staff work during the biennium included providing PacifiCorp with restoration planting specifications, review of the 50%, 70% and 95% engineering documents, establishment and monitoring of three permanent photo stations, and acting as the local project outreach partner with PacifiCorp (mainly via the HRSWCD / HRWG website). <i>Completion of the removal resulted in a) eliminating the most significant barrier to upstream and downstream fish migration in the watershed, b) improving access to 144 miles of upstream habitat, c) achieving compliance with Oregon water quality temperature standards on the lower 4 miles of the Hood River, and d) increasing spring, summer and fall minimum flows up to 500 cfs in the lower 4 miles of the river. Partners included PacifiCorp, HRWG, USFWS, AR, NOAA, ODFW, OWRD, DEQ and CTWS</i>	Oct10 / Complete	NA
2) <u>PacifiCorp Powerdale Lands Acquisition and Transfer</u> / 210-043 (CS) / PacifiCorp, CLT	The HRWG continued working with PacifiCorp, Columbia Land Trust, Hood River County, ODFW and PLS parties during the biennium to select the eventual owner of the 450 acre Powerdale corridor lands (carrying an associated conservation easement) to ensure permanent conservation of the three mile river corridor. <i>HRWG's role included a) facilitating 7 quarterly meetings of the PLS, b) assisting CLT to facilitate one community meeting and one landowner meeting, c) assisting the land trust and partners finalize the conservation easement and ownership plan, and d) continue drafting the Powerdale Corridor Cooperative Stewardship Plan. Importantly, the group conveyed their final decision to PacifiCorp, to grant the lands to Columbia Land Trust, HRC and ODFW in March 2012. The decision was accepted by PacifiCorp. PLS partners included PacifiCorp, NOAA, USFWS, AR, CTWS, ODFW and HRWG.</i>	Jul09- Jun11 / Ongoing	NA
3) <u>CLT Lower Hood River RM1.0 Channel and Floodplain Restoration</u> / 210-043 (CS) /	The HRWG entered into a partnership with CRC and CLT in spring 2010 for planning implementation of this project on the lower Hood River. Goals include restoring a ½ mile long side channel at RM1.0 and 3,000 feet of existing shoreline habitat, both modified by past railroad, road and pipeline activities. CRC will fund implementation as their Oregon mitigation requirement for impacts related to constructing the new I-5 bridge between Portland and Vancouver. Construction of the several million dollar project is expected during the summer 2013 work season. <i>During the biennium, the HRWG a) submitted required nomination information to CRC resulting in eventual project acceptance, b) worked to secure outside funding to pay for 10% design (unsuccessful ODFW application), c) helped CLT develop a statement-of-work to CRC for funding the preliminary design and cost estimate, and d) assisted PacifiCorp, MHRR and CLT remove 3,000 feet of abandoned 9 foot diameter steel pipe from project area. Partners included CRC, CLT and PLS.</i>	Dec09 – Jun11 / Ongoing	One volunteer donated 30 hours during monitoring of side-channel flows in summer 2010.

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
4) <u>MFID Coe Branch Diversion Replacement</u> / 209-4012 (RG) / \$491,453 / MFID, USFS/HRC Title II, CTWS, ODFW	MFID's new \$1.6 million irrigation diversion on Coe Branch (Middle Fork system) was completed in winter 2009. The project resulted in important upgrades aimed at achieving bull trout passage and water quality (sediment) improvements. <i>The project a) eliminated a 5 foot high concrete dam and grated water intake (barriers) to provide 3 miles of additional habitat, b) installed 450 feet of constant gradient (maximum grade of 6%) channel using 6 engineered cross vanes, c) installed a 50 foot FCA horizontal flat plate fish screen, drop pool below screen and 25-35 foot long fish return channel leading back to Coe Branch, and d) achieved compliance with Oregon turbidity standards via installing a new diversion with optimal entrance geometry and FCA fish screen to continuously pass both coarse and fine sediment.</i>	Sep08 – May10 / Complete	NA
5) <u>MFID Emil Creek Water Quality Improvement</u> / 209-4018 (RG) / \$113,493 / MFID	With installation of the 6,000 foot Emil Creek pipeline at a cost of \$196,300, MFID has now piped all but one of its canals. The project also eliminated the last instance of using a native stream for conveying irrigation water in the district. <i>The project eliminated the annual transfer of 22 tons of glacial sediment to Emil Creek, thus achieving DEQ water quality standards and improvement of ESA listed winter steelhead habitat along 3.7 miles of the creek. Work also improved water quality in Laurence Lake reservoir, and bull trout habitat, by increasing reservoir storage, and reducing lake and Clear Branch temperatures. Eventually, the project is expected to increase flows in Clear Branch and the Middle Fork Hood River.</i>	Jul09 – May10 / Complete	NA
6) <u>MFID Evans Creek Fish Passage and Water Quality Improvement Phase 3</u> / 211-4002 (RG) / \$367,059 / MFID, HRWG	The \$537,000 final phase Evans Creek project is currently 50% complete, and is part of a major effort to restore fish passage, improve habitat and enhance water quality for three (3) ESA-listed fish in two major Hood River sub-basins. <i>Installation of the final 11,000 feet of pipeline is underway to replace 100 year-old Glacier Ditch, and prevent an estimated 500 tons per year of sediment from entering historically-clear Evans Creek (East Fork HR system). 5800 feet of pipeline was finished in May11. The project will also permanently save 0.3 cfs water in the Clear Branch (Middle Fork HR) in 2014, after a final irrigation water allocation schedule is developed by MFID, USFWS, NOAA, DEQ and CTWS.</i>	Jul09 – Jun11 / Ongoing	NA
7) <u>MFID Clear Branch Dam Fish Passage Study</u> / 210-043 (CS) / MFID, USFS/HRC Title II	Clear Branch Dam (100 feet tall) was constructed by MFID in 1968. No fish passage facilities are installed at the dam. Under the terms of MFID's Fish Management Plan, the district is now evaluating passage opportunities using a consultant (Anderson Perry and Associates). The study that began in fall 2010 is now 50% complete, and will conclude Dec11. <i>The Fish Passage Feasibility Study will identify a preferred design alternative to achieve the multiple project goals of optimizing irrigation and hydropower operations and minimizing adverse effects on salmonids in transit (upstream and downstream) around Clear Branch Dam.</i>	Sep10 - Jun11 / Ongoing	NA
8) <u>MFID In-stream Flow Study</u> / 211-4018 (TA) / \$50,000 / MFID, USFS/HRC Title II, USFS, CTWS	MFID water diversions of up to 80 cfs can deplete river flows as much as 75%, which significantly impacts ESA-listed bull trout, winter steelhead, and Chinook. This study is allowing MFID and FMP partners to understand and model alternative flow regimes below diversion points in Clear, Coe and Eliot branches, and in the Middle Fork Hood River. Study results will then be used during 2012-2020 to identify and implement alternative diversion regimes. <i>In summer of 2011, MFID completed the bid selection process, and selected a consultant to complete the study in the coming biennium.</i>	Oct10 – Jun11 / Ongoing	NA

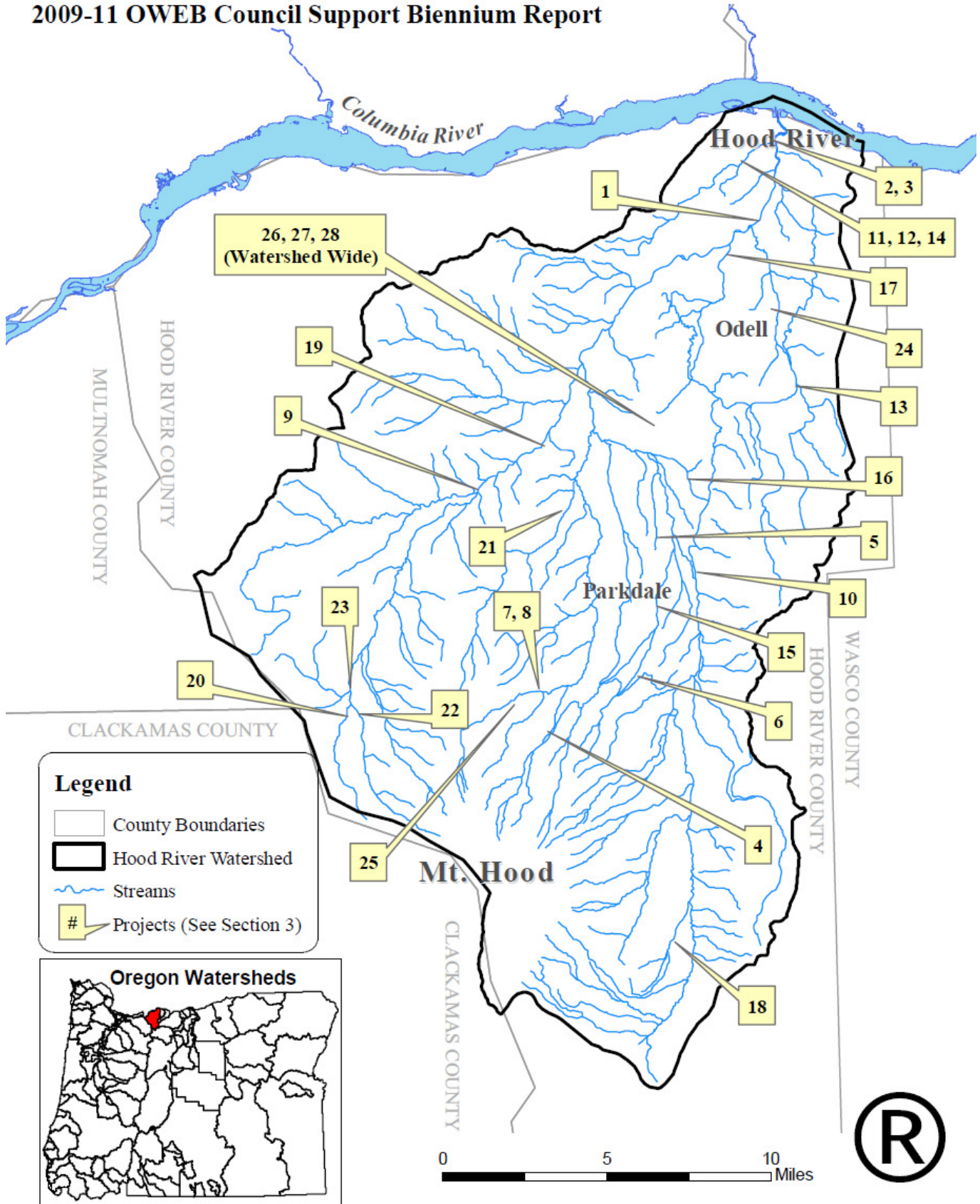
Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
9) <u>DID Piping and Passage / RG (pending) / \$505,600 / DID, CTWS</u>	This project addresses failures to meet West Fork Hood River minimum in-stream flows and summer passage for summer steelhead, spring Chinook and Coho. The dilapidated 23,918 foot Dee Flat Ditch system will be replaced with a new pipeline to prevent water losses. <i>Conversion of 100% of the saved water in-stream will permanently conserve 3.0 cfs flow in the West Fork and improve passage flows below the diversion. The project also addresses lost connectivity between the West Fork and four tributaries for coastal cutthroat and rainbow trout, and will eliminate ditch system failures and the annual contribution of 100 tons of artificial sediment. Eighty-two percent (82%) of the project cost is being provided as cash match by CTWS and DID.</i>	Aug10 – Jun11 / Ongoing	NA
10) <u>EFID Main Canal Diversion Replacement and Neal Creek Water Quality Upgrades / EFID, CTWS, HRC/USFS Title II</u>	The 100+ year old EFID diversion (push-up dam) on the East Fork Hood River is scheduled for replacement in 2012 to provide better upstream and downstream fish passage, improved East Fork flows, and better water quality in both the river and irrigation system. <i>By spring 2009, EFID completed a preliminary engineering study (funded by CTWS) that analyzed design alternatives. In March 2011 the district finished a CTWS funded 35% design that incorporates a new diversion intake angle, multiple water intakes, and an adjustable Obermeyer weir. The final design (via Title II) will be completed by fall 2011. Finally, EFID hopes to construct the \$1.6 million project in 2012 with help from OWEB (October 2011 grant cycle) and CTWS.</i>	Jul09 – Jun11 / Ongoing	NA
11) <u>FID Lower District Pressurization / 210-043 (CS) / FID, Energy Trust of Oregon, Oregon Department of Environmental Quality, ODFW, ARRA, Oregon Department of Energy.</u>	Increasing Hood River stream flow is a principal driver behind many of the irrigation improvement projects underway in the valley. This \$4.8 million project installed 8.5 miles of pipe, flow meters and flow restrictors. The district also replaced 185 inefficient pumps with one central pumping station. <i>Project outcomes included a) conservation of 500,000 kWh of power, b) increased renewable energy production by 465,000 kWh, and c) conservation of 4.5 cfs Hood River stream flow at RM 4.0 or RM 11.4 of the Hood (depending on river stage). Note that the stream flow conservation outcome is being made possible via a 2009 minimum in-stream flow agreement transacted by FID and ODFW.</i>	Jul09 – Aug09 / Complete	NA
12) <u>FID Berens' Bend Indian Creek Restoration / 210-043 (CS) / FID, ARRA.</u>	This \$70,000 project restored a badly degraded segment of Indian Creek near the intersection of Barrett and Methodist roads in summer / fall 2009. The creek had previously been shifted into the road ditch with a 4ft passage barrier. <i>The project converted 200 feet of ditch into 300 feet of new meandering stream, corrected a fish passage barrier, and installed 300 riparian trees and shrubs. The ICS group is currently working to install an educational sign at the location.</i>	Jul09 – Jun10 / Complete	An estimated 10 ICS volunteers expended 20 total hours helping to design this project.
13) <u>ODF / CTWS / HRSWCD Neal Creek Riparian Restoration / 209-4024 (RG) / \$49,940 / CTWS, HRC, ODF, HRSWCD</u>	This \$103,451 riparian and in-stream restoration project targeted removal of old road and bridge infrastructure, reestablishing streamside conifers and increasing LWD frequency. Beginning spring 2009 and ending spring 2010, ODF, CTWS and HRSWCD completed work to address key habitat quantity, habitat diversity, stream channel stability, floodplain function and riparian habitat conditions on 2.1 miles of Neal Creek. <i>During the biennium, 80 pieces of wood were placed, 2.1 miles (3.6 acres) of the abandoned road was decommissioned and restored, an abandoned bridge was removed, 300 feet of side-channel was re-activated, and 4,400 conifers were planted on 10 riparian acres. HRSWCD was the project manager and fiscal agent for the OWEB grant.</i>	Jul09 – May10 / Complete	NA

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
14) Pacific Power-ICS Union Avenue Riparian Revegetation / 14-10-012 (SG) / \$675 / PacifiCorp, FID, PHR	This project demonstrates the use of high-density, low-growing shrubs below riparian area transmission lines. If successful, regular vegetation management (spraying and tree removal) will be eliminated, resulting in improved riparian functions. <i>This biennium, the partners a) re-graded and removed 0.5 acres of blackberry and knapweed, b) planted 625 shrubs, c) applied 70 cubic yards of wood chips at the site and d) performed post-project vegetation control. Partners included Pacific Power, HRWG, ICS, Port of HR. SOLV, HRSWCD, EFID and OSU.</i>	Jan – Jun11 / Ongoing	Approx. 52 ICS, HRWG, Hood River Lions, KHS, ICS, and Earth Day volunteers donated about 179 hours during the project.
15) HRC Evans Creek Hutson Drive Culvert Replacement / 209-4056 (RG) / \$449,990 / HRC, CTWS	Evans Creek (an important winter steelhead, cutthroat and Coho bearing tributary to the East Fork Hood River) is currently blocked at RM 2.5 by two culverts that act as velocity and drop height barriers. The solution outlined in the Action Plan (project AP-9-08) entails replacing the failed culverts with a 23 foot bottomless arch to open 1.3 miles of additional habitat. HRC is completing this \$632,690 project, and the final design was done during the biennium. Construction will start pending acquisition of right-of-ways.	Jul09 – Jun11 / Ongoing	NA
16) Ann Lameka Graham Creek Bridge Replacement / 210-043 (CS) / Ann Lameka, FID	HRWG and partners helped the landowner to upgrade emergency response access to the property, and restore natural functions that are critical to Graham Creek. The existing structure did not adequately pass water, sediment and wood. Also, continued upstream sediment deposition, followed by structural failure and down-cutting, threatened to create a barrier to fish and degrade downstream water quality. <i>In Aug10, the old bridge was removed, and a new 16 x 20 foot steel bridge (donated by FID) was installed to increase flow capacity. Partners included Ann Lameka, FID, ODF, HRWG and ODFW.</i>	Jul09 - Aug10 / Complete	NA
17) Odell Creek Hydro Decommissioning / 210-043 (CS) / Project Owner	HRWG partners are assisting the project owner to develop plans for decommissioning this OWRD licensed facility near the base of Odell Creek. Partners are working to secure OWEB funding to negotiate sale of the water right to TFT, and completion of a 25% design for decommissioning the 12 foot dam followed by restoration of the creek. <i>Work completed this biennium included decommissioning negotiations, work plan development, and submission of an OWEB technical assistance application. Partners include the project owner, TFT, FID, OWRD, ODFW, OWEB and HRWG.</i>	Jul09 – Jun11 / Ongoing	NA
18) USFS Robinhood Creek Watershed Restoration / 206-833-6009 (RG) / \$19,800 / 208-4070 / \$113,535 USFS, HRSWCD	The USFS now approaches watershed restoration on a basin-wide level to restore degraded functions. This project was completed in 2011, and involved a) decommissioning 2 miles of road, b) storm-proofing 8 miles of road, c) noxious weed treatment along 3 miles of road, d) LWD placements in 1 mile of stream, e) 58 acres of riparian thinning along 1 mile of stream, and f) removal of 4 culverts. <i>Measurable outcomes include a) elimination of 4 fish passage barriers, b) achievement of reduced road density, sediment and noxious plant targets, and c) improved stream habitat complexity, LWD frequency, pool frequency and spawning gravels in 1.0 miles of stream.</i>	Mar08 – Mar11 / Complete	NA
19) CTWS Native Steelhead and Chinook Re-Introduction / CTWS	An important component of the Hood River Production Program involves selective retrieval of egg and sperm from native steelhead and Chinook for hatching at the Parkdale, Carson and Round Butte fish facilities. Smolts are then raised at the ODFW Oak Springs Hatchery on the Deschutes River, for later release into the Hood. Hood River Watershed Group staff and volunteers annually assist the tribes and ODFW when acclimating the	Jul09 – Jun11 / Ongoing	HRWG staff and volunteers contributed 22 days (230 hours) of

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
	resultant smolts in temporary ponds set-up at two locations. <i>In spring 2010, a total 158,762 spring Chinook and 45,364 winter steelhead were acclimated and released. In spring 2011, 149,756 spring Chinook and 50,995 winter steelhead were acclimated and released.</i>		labor for pond set-up, pond take-down, PIT tagging and overnight caretaking.
20) <u>CTWS Elk Creek Large Wood Placement</u> / CTWS, USFS	In summer 2010, the CTWS and USFS partnered in the design and construction of this project targeting a privately-owned, one-half mile reach of Elk Creek, a West Fork Hood River tributary that supports summer steelhead and spring Chinook. CTWS sponsored the project, co-designed the project plan, and oversaw construction and monitoring. The USFS provided co-design help, on-site assistance, and donated logs from federal lands. HRWG staff assisted the CTWS with pre-restoration survey work. Two hundred logs were used to create 17 log jam structures, and a 500 foot long abandoned side channel was re-activated to carry 20% of the creek's flow. <i>Outcomes included a) improved stream habitat complexity, LWD frequency, pool frequency and spawning gravels in 0.5 miles of Elk Creek, b) reconnected 500 feet of side channel, and c) increased floodplain LWD frequency on 2 acres via addition of 100 logs.</i>	Jul09 – Oct10 / Complete	NA
21) <u>CTWS Middle Fork Falls Remediation</u> / CTWS	The Middle Fork Hood River supports important populations of bull trout, spring Chinook and winter steelhead. During November 2006 flooding, a 10 foot high falls developed at RM 2.5 that was a barrier to upstream spring Chinook migration. CTWS developed a plan for improving passage at the falls in 2008-2010. On July 19, 2010, the tribes completed work to reconfigure the falls using a spyder backhoe. <i>Since completion, spring Chinook, winter steelhead and Coho movement have been documented above RM 2.5. Outcomes include a) restored passage to approximately 20 miles of upstream habitat, and b) renewed migration of spring Chinook and winter steelhead to the CTWS Parkdale Fish Hatchery for native fish propagation</i>	Jul09 – Jul10 / Complete	NA
22) <u>CTWS McGee Creek In-channel and Floodplain Restoration</u> / 210-8000 (RG) / \$69,300 / CTWS, USFS	The upper West Fork is historically prime spawning and rearing habitat for spring Chinook and summer steelhead, but currently displays low in-stream LWD and poor floodplain interaction. This project seeks to increase LWD frequency, expand channel gravel collection and improve floodplain connections. During the project term, the CTWS and USFS completed required surveys and final design, contracting and permitting. <i>This project will be completed in July 2011 via helicopter.</i>	Jul09 – Jun11 / Ongoing	NA
23) <u>CTWS Hood River Stream Nutrient Enhancement</u> / CTWS, PSMFC	Current Chinook return populations are much lower than historical returns. Without these populations the in-stream and terrestrial systems that rely on the influx of ocean nutrients from spawned out fish are depleted. This project attempts to mimic historical nutrient influx by placing both carcasses and nutrient pellets in-stream. <i>During the biennium, 5,182 pounds of Chinook carcasses and 3,520 pounds of fish analog pellets were placed in-stream throughout the West Fork, Neal Creek, and high-density spawning areas of the East Fork system.</i>	Sep09 & Sep10 / Ongoing	5 volunteers provided an estimated 30 hours.
24) <u>CTWS – CGFG Orchard Spray Buffer Installation</u> / CTWS, CGFG	In response to pesticide monitoring results, CTWS, CGFG and HRWG began work in winter 2010 to implement a project intended to install vegetated spray buffers between waterways and orchards. The partners completed their first two project installations in spring 2011 with two large orchards in the valley. <i>A total of 2,118 feet of spray buffer was planted, via installation of 1,000 live stakes. Plant survival has yet to be monitored.</i>	Jun11 / Ongoing	NA

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
25) <u>USFS Upper Middle Fork Hood River Watershed Restoration / 2008-703 (RG) / \$33,000 / USFS</u>	This project used a helicopter to place large wood in 0.5 miles of Clear Branch, a stream in the Upper Middle Fork Hood River 6th field watershed. The project also augmented existing large wood on 12 acres of the Clear Branch floodplain. <i>Resulting outcomes included a) increased amount of low-flow spawning habitat for bull trout, b) reconnection of the stream channel to the floodplain, and c) increased hydrological stability to reduce sedimentation.</i>	Aug08 – Nov09 / Complete	NA
26) <u>Hood River OWEB Small Grant Program / # 14-08-000 (SG) \$100,000 / private landowners</u>	The OWEB-sponsored Hood River Small Grants Team (HRWG, HRSWCD and CTWS) worked together during the biennium to select and fund 12 new projects, including 10 water quality and 2 habitat enhancements. Eight of the water quality/irrigation improvement projects funded this biennium, as well as two previously funded projects, were completed during the reporting period. Two habitat enhancement projects were also completed. These completed projects were matched by \$89,534 in local contributions. <i>Outcomes included a) reduction of water usage by 40-50% on 94.6 acres of orchard, b) improved plant diversity by treating noxious weeds on 5.5 riparian acres, and c) improved plant diversity by planting 725 native trees and shrubs.</i>	Jul09 – Jun10 / Complete	NA
27) <u>Hood River County / USFS Title II Watershed Restoration / USFS</u>	Since 2002, the county and watershed group have cooperated on the allocation of USFS Title II (Secure Rural Schools and Community Self-Determination Act of 2000) dollars. During the last 10 years (FY02-11), Hood River County directed over \$3.67 million in Title II funds toward completion of Hood River watershed restoration projects. <i>In FY10 and FY11, the county worked with the watershed group to fund \$414,000 for 11 projects, the most significant contributions being \$101,000 for designing the new EFID irrigation diversion, \$41,005 for Barlow Road fish passage, \$27,270 for McGee Creek riparian thinning, \$34,560 for riparian tree thinning along Robinhood Creek, \$26,000 for Middle Fork in-stream flow assessment and \$105,000 for thinning and timber stand improvements on the national forest.</i>	Jul09 – Jun11 / Ongoing	NA
28) <u>USDA Natural Resource Conservation Service (NRCS) – Hood River Basin Programs /</u>	The most significant NRCS program used in the basin is the Environmental Quality Incentives Program (EQIP). EQIP provides technical and cost-share assistance to landowners for installing a variety of conservation practices. Assistance was made available to producers converting to micro-sprinkler irrigation, installing new irrigation mainlines, practicing better irrigation water management, planting tree buffers to reduce chemical spray drift, and performing various alternative pest management activities. <i>During FY10-11, 246 additional EQIP acres were enrolled in the Hood River valley, including 18.6 acres enrolled under the new organic EQIP program.</i>	Jul09 – Jun11 / Ongoing	NA

**Location of Projects Listed in Hood River Watershed Group
2009-11 OWEB Council Support Biennium Report**



4. List of Implemented Education, Outreach, Assessment and Monitoring Activities.

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
1) <u>HRWG Meeting Coordination</u> / 210-043 (CS) / OWEB, CTWS, EFID, FID & MFID	Meetings of the watershed group resulted in visioning, project prioritization, planning and directing the group's work. <i>A total of 20 meetings were planned and performed. The HRWG also formulated and began utilizing a new operations committee during the term, to help direct staff, create annual work plans and oversee financial operations.</i>	Jul09- Jun11 / Complete	Total meeting attendance was 532 during term (1064 volunteer hours). Attendance averaged 27 per meeting.
2) <u>HRWG Meeting Presentations</u> / 210-043 (CS) / OWEB, CTWS, EFID, FID & MFID	Informative meeting presentations are one key to the high level of HRWG community involvement. <i>A total of 18 special presentations (attended by 474 individuals) were performed in conjunction with regular meetings.</i>	Jul09- Jun11 / Complete	Total presentation attendance is included above. Volunteer time donated by presenters was approx. 50 hours.
3) <u>HRWG News Article Publications</u> / 210-043 (CS) / OWEB, CTWS, EFID, FID & MFID	Publication of print media articles (e.g., newspapers) represented a valuable means of keeping the public informed on HRWG priorities, plans and actions during the term. <i>A total of 62 print media items were published during the biennium.</i>	Jul09- Jun11 / Complete	NA
4) <u>HRWG Website Publications</u> / 210-043 (CS) / OWEB, CTWS, EFID, FID & MFID	The joint SWCD / HRWG website (www.hooddriverswcd) was actively updated by both staff during the period. Updated website content included the 2007-09 OWEB biennial report, meeting notices, meeting agendas and minutes, informational articles (e.g., Powerdale Dam removal, raptor pole installations, Indian Creek Stewards' activities, etc.) and HRWG Field Series announcements. <i>The website averaged 2,083 page views (1,026 unique visits) per month. The HRSWCD also launched a quarterly email newsletter in fall 2010. In the biennium, 3 editions were sent to an average of 860+ recipients. In those newsletters, there were a total of 10 HRWG-specific articles</i>	Jul09- Jun11 / Complete	NA
5) <u>HRWG Fact Sheets</u> / 210-043 (CS) / OWEB, CTWS, EFID, FID & MFID	During the FY11-13 council improvement process, the HRWG membership targeted creation of a new set of HRWG fact sheets for education and member orientation. Since then, HRWG members and staff have begun planning the new sheets. <i>To date, staff has begun outlining the content of the fact sheets.</i>	Jan11 – Jun11 / Ongoing	The HRWG chair donated an estimated 5 hours related to fact sheet organization.
6) <u>HRWG Field Series Community Education Classes</u> / 210-043 (CS) / CTWS, EFID,	The "Field Series" program strives to disseminate sound, science-based watershed education throughout the basin, via HR School District Community Education classes targeting topics on Mt. Hood, the Hood River, natural resource management and basin projects. HRWG staff planned and implemented a total of 10 educational field series events during the biennium. <i>Measurable outcomes included educating a total of</i>	Jul09- Jun11 / Complete	89 student volunteers (478 hours) participated. 11 instructor

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
FID & MFID	<i>89 individuals on watershed science and HRWG activities.</i>		volunteers (134 hours) helped plan and perform classes.
7) <u>ICS Group Coordination / 210-043 (CS) / CTWS, EFID, FID, MFID</u>	With assistance of several principal partners including the CGCC, HRVHS and FID, the HRWG sponsors the Indian Creek Stewards (ICS) group. The ICS works to integrate public stewardship, education, recreation and ecological interpretation, along with residents of Hood River. <i>The HRWG organized 18 monthly ICS meetings during the term. Other major accomplishments are listed below, and in Section 3.</i>	Jul09- Jun11 / Complete	Total meeting attendance was 130 during term (195 volunteer hours). Attendance averaged 7 per meeting.
8) <u>HCS 6th Grade Indian Creek Program /</u>	As part of the ICS effort, the HRWG, CGCC and other partners assisted Horizon Christian School design and implement a 5 th and 6 th grade class project during the 2010-11 year. Students studied riparian plant community composition, mapping techniques, forest measurements, stream flow measurement and a fish electro shocking survey. Subsequent to site assessments, students designed and installed a restoration plot using “live stakes”. This plot, dubbed the “Wave” is an addition to the “Big Fish” plot installed in the prior biennium. <i>A total of 8 outdoor classroom sessions were performed during the reporting period, and 60 live stakes were installed in the 160 square foot restoration plot. A 20 foot tall raptor perch was also installed in the HCS plot in Nov09 involving CGCC and the ICS group.</i>	Jul09- Jun11 / Complete	Estimated 24 student volunteers (180 hours) participated. Estimated 10 instructors, agency and parent volunteers (37 hours) planned & performed.
9) <u>KHS Earth Day Program / 210-043 (CS) / CTWS, EFID, FID, MFID and multiple donations of food, drinks, etc.</u>	Hood River’s Klahre House School performed vital restoration-based educational activities with the Indian Creek Stewards on Earth Day 2010 and 2011. Students and teachers performed vital weed control, plant maintenance, mulching and trash clean-up at Tara’s Place, Union Avenue and CGCC sites. <i>Two events were performed, that resulted in 110 native trees planted, 3 cubic yards of cedar chips spread, weeding of 250 square feet, 313 pounds of trash removal, and installation of a 25 foot tall raptor perch / nesting platform in March 2010. An ancillary raptor pole installation was completed August 2009 in cooperation at the Indian Creek Golf Course.</i>	Apr09 & Apr10 / Complete	43 student volunteers (136 hours) participated. 16 instructor volunteers (44 hours) helped plan and perform events
10) <u>HRVHS – CAL Emily’s Grove Riparian Restoration / 210-043 (CS) / CTWS, EFID, FID & MFID</u>	The high school’s Center for Alternative Learning provided valuable assistance at the Emily’s Grove project, where the ICS group is working to restore about 2 acres of riparian forest along the Indian Creek trail. <i>During the biennium the class cleared 1700 sq ft of blackberry and knapweed. The class also installed a 20 foot tall raptor perch and nesting platform in April 2010.</i>	Jul09 – Jun11 / Ongoing	57 student volunteers (187 hours) participated. 8 instructor, parent and citizen volunteers (20 hours) helped plan and perform events

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
11) Hood River Basin-wide Pesticide Monitoring / CTWS, DEQ, HRSWCD	Monitoring of target pesticides has been ongoing since 1999. The Pesticide Stewardship Partnership is a cooperative effort by HRWG, HRSWCD, Columbia Gorge Fruit Growers, DEQ, CTWS, OSU Extension Service and EPA. Over time, both detections of organophosphate pesticides and exceedences of standards have diminished, in part due to outreach by HRWG, OSU Extension and CGFG about alternatives to organophosphates. In 2009, there was only one detection of an organophosphate pesticide, and for the second straight year, no detections of the organophosphate chlorpyrifos. In 2009, the suite of chemicals analyzed was increased from a dozen to 100. Additional, non-agricultural chemicals were identified, leading to a broader monitoring focus. Outreach efforts included cost-share support for orchardists using pheromone disruptors rather than organophosphates. Future outreach will include cost-shared planting of vegetative buffers on area waterways. The USGS is joining the partnership in 2011 and will increase the scope of monitoring efforts. <i>Outcomes included decreased levels of organophosphate pesticides detected in surface waters throughout the basin.</i>	Jul09 – Jun11 / Ongoing	NA
12) MFID Laurance Lake System Monitoring / 210-043 (CS) / MFID	Since 2007, the HRWG has provided flow and temperature monitoring assistance to MFID to understand elevated water temperatures in Laurance Lake and tributaries, and resulting impacts to bull trout populations. Data will also enable development of new irrigation water routing and sediment settling systems to lower lake and tributary temperatures. <i>Watershed group staff conducted a combined total of 16 flow measurements on Clear Branch and Coe Creek, annually deployed 14-15 recording thermographs, conducted temperature audits, and transmitted resulting data to MFID and DEQ.</i>	Jul09- Jun11 / Ongoing	3 volunteers (approximately 21 hours) assisted HRWG and MFID.
13) EFID Central Canal Pipeline Project Water Quality Monitoring / 210-043 (CS) / EFID, BOR	Staff began the final three year monitoring phase primarily intended to document post-project outcomes of this large pipeline installation (mainly sediment reductions). <i>A total of 32 water quality sampling rounds (and continuous water temperature recording), was completed at 9 sites during the reporting period. Quality controlled data was retrieved and filed with DEQ and EFID.</i>	Jul09- Jun11 / Completed	1 volunteer (approximately 12 total hours) assisted HRWG and EFID during term.
14) HRC Water Resources Inventory and Planning / 210-043 (CS) / CTWS, EFID, FID, MFID, HRC	With help and involvement from the HRWG, Hood River County formed a multi-stakeholder Water Resources Planning committee in January 2008 that is continuing to devise a water resources inventory and plan. <i>During the period, the county committee met approximately 9 times. The group also submitted a successful \$200,000 BOR WaterSmart application for completion of a planning and management strategy document.</i>	Jul09- Jun11 / Ongoing	Approximately 9 citizen and agency volunteers (162 total hours) assisted HRC and HRWG during term.
15) CTWS Irrigation Ditch Fish Monitoring and Fish Salvage / 210-043 (CS) / CTWS	Beginning the middle 1990s, HRWG partners have done fall fish salvages in ditches below diversions that lack adequate fish screens. The two-part purpose of the annual salvage is to monitor fish screen effectiveness, and return trapped fish back to the Hood River. <i>In fall 2009, a total 566 rainbow/steelhead, 24 Chinook, 60 sculpin and 4 cutthroat were salvaged from the top section of EFID Main Canal. In fall 2010, a total of 930 rainbow / steelhead, 317 Chinook and 129 sculpin were saved from the same section.</i>	Jul09- Jun11 / Ongoing	8 volunteers (40 total hours) assisted HRWG and CTWS during term.
16) CTWS Basin Fish Monitoring and Habitat	HRWG staff actively support the efforts of all its main partners. Utilizing the group's 2009 and 2010 AmeriCorps interns and newly hired Watershed Assistant, the HRWG provided assistance to CTWS fish biologists in	Jul09- Jun11 / Ongoing	7 volunteers (56 total hours)

Project Name / OWEB Grant # / Amount (\$) / Other Funding	Description / Measurable Outcomes / Partners	Date / Status	Volunteer Hours & Description
<u>Program Assistance / 210-043 (CS) / CTWS</u>	performing redd surveys, fish tracking, PIT tagging (described above), stream surveys, fish salvage (described above), fish acclimation (described above) and documenting water quality, large wood presence and fish populations in the Hood River system. <i>HRWG staff provided a total of 43 days assistance to CTWS during the reporting period.</i>		assisted HRWG and CTWS during term.
<u>17) CGCC Indian Creek Baseline Water Quality Monitoring Project / 210-043 (CS) / CGCC</u>	As listed in the ICS work plan, the CGCC environmental sciences program collects baseline water quality data at 8 stations in the basin. <i>Seven (7) quarterly monitoring rounds were completed during the reporting period by the college, with help from Columbia Riverkeeper and HRWG.</i>	Jul09- Jun11 / Ongoing	35 volunteers (350 total hours) were used to collect samples, perform field tests and classroom lab work.
<u>18) Hood River Irrigation Upgrade Flow Meter Monitoring / 210-4030 (MG) \$9,979 / HRSWCD</u>	This HRSWCD project is evaluating annual water usage in upgraded versus conventional irrigation systems used in Hood River valley orchards. Monitoring is being done with several small OWEB grant recipients who are upgrading their point-of-use irrigation systems. Due to equipment malfunctions, some data gaps and data errors have been experienced. <i>Eventually, the study will document the water savings achieved via the irrigation upgrades, and will also document the impacts of management techniques on water conservation. Project tasks will include monitoring of 26 flow meters, and tracking 419 acres of irrigated land for three years. Also, new or replacement meters will be installed at 10 sites (including one conventional system for comparison).</i>	Apr10- Dec12/ Ongoing	NA

5. Annual Reporting to Local Natural Resource Agency Partners, Annual Briefing to Hood River Board of Commissioners, HRWG Work Plan and Council Self-Improvement Plan.

Attachment A: Email of 11Aug11 transferring FY09-11 OWEB Biennial Report to HRWG membership

Attachment B: Copy of 20Jun11 HRWG annual briefing to HR Board of Commissioners

Attachment C: Copy of HRWG annual work plan,

Attachment D: Copy of council self-evaluation and improvement plan.

6. List of Abbreviations Used in this Report.

ARRA	American Recovery and Reinvestment Act of 2009
BPA	Bonneville Power Administration
BOR	U.S. Bureau of Reclamation
BPA	Bonneville Power Administration
CHR	City of Hood River
CGCC	Columbia Gorge Community College
CGEI	Columbia Gorge Ecology Institute
CGFG	Columbia Gorge Fruit Growers (previous Hood River Grower Shipper)
CLT	Columbia Land Trust
CommEd	Hood River County School District - Community Education
CS	Council Support Grant (OWEB)
CTWS	Confederated Tribes of Warm Springs Reservation Oregon
DEQ	Oregon Department of Environmental Quality
DID	Dee Irrigation District
DSL	Oregon Department of State Lands
EFID	East Fork Irrigation District
EPA	U.S. Environmental Protection Agency
ESA	U.S. Endangered Species Act
FCA	Farmers Conservation Alliance
FMP	Fish Management Plan
FID	Farmers Irrigation District
HRC	Hood River County
HRVHS	Hood River Valley High School
HRSWCD	Hood River Soil and Water Conservation District
HRVPRD	Hood River Valley Parks and Recreation District
HRWG	Hood River Watershed Group
ICS	Indian Creek Stewards
LT	Longview Timberlands
LWD	Large Woody Debris
MCAREC	Mid-Columbia Agricultural Research and Extension Center
MFID	Middle Fork Irrigation District
MHID	Mt. Hood Irrigation District
MG	Monitoring Grant (OWEB)
NOAA	National Oceanic and Atmospheric Administration – Fisheries Division

NWPCC	Northwest Power and Conservation Council
NRCS	US Natural Resources Conservation Service
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ORV	Off Road Vehicle
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board
PSU	Portland State University
PSMFC	Pacific States Marine Fisheries Commission
PLS	Powerdale Lands Stakeholders
RG	Restoration Grant (OWEB)
RM	River Mile
SG	Small Grant (OWEB)
SRF	State Revolving Fund
TA	Technical Assistance Grant (OWEB)
TAC	Hood River Watershed Group – Technical Advisory Committee
TMDL	Total Maximum Daily Load
TFT	The Freshwater Trust
TSS	total suspended solids
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WRC	Western Rivers Conservancy
WRD	Oregon Water Resources Department