

Willamette Basin Mitigation Program

Annual Report
2001 - 2002



DOE/BP-00005885-2

January 2003

This Document should be cited as follows:

Sieglitz, Greg, "Willamette Basin Mitigation Program", Project No. 1992-06800, 16 electronic pages, (BPA Report DOE/BP-00005885-2)

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views in this report are the author's and do not necessarily represent the views of BPA.

Willamette Basin Mitigation Program

Annual Report
October 1, 2001 to September 30, 2002 and December 2002

Willamette Basin Mitigation Program
Project No. 199206800

Prepared by
Greg B.Sieglitz
Willamette Basin Mitigation Program Manager

Prepared for
Bonneville Power Administration

January 15, 2003

Summary of Significant Results and Activities

- Hired GIS Analyst**
- Completed HEP, NEPA, and real estate work for 22 acre Canby and 220 acre Corvallis properties**
- Completed purchase of the Corvallis and Canby conservation easements**
- Completed MOA and conservation easement documents for the 265 acre Crocker project**
- Completed HEP sampling at Canby, Corvallis, Crocker and the 30 acre Walken site**
- Completed the management plan for the 221 acre South Pasture site**
- Planted trees and vegetation on 10 acres of the 44 acre Sorenson site and 17 acres of the South Pasture site**
- Completed an English ivy removal project on 20 acres of the 60 acre Rock Island site**
- Completed appraisals on the 150 acre Abernathy, Crocker, Canby, 67 acre Stayton, 200 acre Koenig properties**
- Conducted public hearings for the Canby and Corvallis projects**
- Completed InterFluve modeling of floodplain restoration opportunities at the South Pasture and Sorenson project areas**
- Participated in the Willamette Subbasin Summary development**
- Participated in the Rolling Provincial Reviews and solicitation for the Lower Columbia and Estuary provinces**
- Participated in the Rolling Provincial Review and solicitation for the Mainstem/Systemwide province**
- Participated in numerous CBFWA and NWPPC processes and meetings**

Major Obstacles Encountered During Contract Period

-Unplanned two month dispute and resolution process at the close of the Canby and Corvallis acquisition projects. This caused delays in completing the acquisitions and impacted subsequent acquisition timelines such as Crocker and developing management plan contracts for Canby and Big Island.

-De-obligation of \$1.8M in acquisition funds from the contract during the final two months of the contract. This impacted the ability to close the Crocker project prior to the contract end date and raised uncertainty to the commitments ODFW could provide to Lane County. Two plus years of work on this acquisition may be wasted if funds are not provided to complete the transaction.

-Late scheduling of field visits and no data from the Regional HEP Team prevented the analysis and compilation of crediting data for a number of sites this contract period.

Objective 1

Using the Alternative Team Recommendations and other planning documents developed to date, acquire, enter into easements, and/or enhance properties that will deliver habitat credits to BPA within the Middle Fork and Coast Fork Willamette Confluence focus area.

Pre-acquisition Activities

Task 1.1: Determine baseline HEP values on public lands to be enhanced using Confluence area HEP report and data. These areas include the South Pasture, Springfield Utility Board well fields, Georgia Pacific parcel, Sorenson parcel, and confluence project areas Outlined in the Alternatives Team Recommendations.

Duration: October 1, 2001 – August 30, 2002

- **HEP work was scheduled with the Regional HEP Coordination Team for this project area. The sampling was supposed to occur during the second quarter of the contract period however the HEP Team cancelled those visits. As a result, HEP sampling did not occur until the end of August. It was not possible to complete this task during the contract period since the sampling did not occur until so late and results have still not been provided to ODFW. It is expected that one of the primary areas to focus work during the next contract period will be to acquire the data from the regional HEP Team and continue with Task 3.5 working with the region to establish and resolve at least some of the methods used to calculate and provide credit to BPA for existing investments.**

Task 1.2: Arrange for the NEPA compliance surveys to be conducted on the public lands and lands to be acquired in the Confluence focus area.

Duration: October 1, 2001 – August 30, 2002

- **NEPA work has been completed for current activities in the project area. No new lands were added in this particular geographic area during the contract period so it was unnecessary to conduct NEPA sampling this year.**

Task 1.3: Develop baseline HEP estimates for lands to be acquired.

Duration: January 1, 2002 – January 31, 2002, June 10, 2002 – July 8, 2002, September 2, 2002 – September 30, 2002

- **No new lands were identified for acquisition in this project area so this task was unnecessary.**

Acquisition Activities

Task 1.4: Develop a budget reflecting costs of acquisition and or easements for each parcel as it becomes available for purchase/easement.

Duration: Periodically from October 1, 2001 – September 30, 2002

- **No new lands were identified for acquisition in this project area so this task was unnecessary**

Task 1.5: Develop Intergovernmental Contracts to transfer funds to accomplish 1.4.

Duration: Periodically from October 1, 2001 – September 30, 2002

- **No new lands were identified for acquisition in this project area so this task was unnecessary.**

Management Plan Activities

Task 1.6: Develop specific habitat management plans and budgets for each acquired parcel or for each parcel to be improved.

Duration: Periodically from October 1, 2001 – September 30, 2002; but within 1 year of acquisition.

- **The final draft of the South Pasture Management Plan was completed and adopted by the Lane County Parks Advisory Board and Lane County Board of Commissioners. The final report was sent to BPA for review.**

Management Plan Implementation Activities

Task 1.7 Develop Intergovernmental Contracts to transfer funds to accomplish 1.6.

Duration: Periodically from October 1, 2001 – September 30, 2002

- **This task was completed.**

Task 1.8: Contract with selected engineering and construction firms for implementation of some aspects of wetland and vegetation enhancement and manipulation.

Duration: On a few occasions from October 1, 2001 – September 30, 2002

- **InterFluve was contracted by Friends of Buford Park(FBP) using other funds to conduct preliminary modeling of restoration concepts on the South Pasture and Sorenson project areas during previous phases. These included engineering studies and diagrams to determine the feasibility of restoring hydrologic connections to the Coast Fork Willamette River in abandoned river channels on the Sorenson and South Pasture project areas. Future aspects of the contractor's work may be funded by the Program however costs are quite high and benefits to anadromous fish are apparently quite low due to their minimal presence in the Coast Fork. Further work will be necessary to establish likely benefits to resident fish and wildlife prior to costly earth-moving work.**

Task 1.9 Implement habitat improvement measures such as: wetland development, vegetation planting, and non-native vegetation removal.

Duration: October 1, 2001 - February 28, 2002 & July 1, 2002 - September 30, 2002.

- **Non-native vegetation removal occurred on 10 acres of the 44 acre Sorenson property. It was planted with 3000 native big-leaf maple, Oregon ash and black cottonwood trees and 500 shrubs.**
- **Seventeen acres on the 220 acre South Pasture Project area were planted with 1000 big-leaf maple, Oregon ash, and black cottonwood trees and 1400 shrubs.**
- **Replanting will not likely occur during the winter of 2002-2003 due to the uncertainty of BPA funding and the lack of a contract during the months of October and November. Planning for work crews, supplies, developing contracts and other logistics generally has taken place during these months with planting implemented in January and February. The last ten acres of the Sorenson site to be restored could have been planted had it not been for these delays and uncertainties.**

Objective 2

Acquire, enter into easements, and/or enhance properties that will deliver habitat credits to BPA within the current Willamette Basin focus areas. These include the Upper Middle Fork Willamette, lower McKenzie River, Coast Fork Willamette, Mary's River and Muddy Creek confluence, North Santiam, lower mainstem Willamette River and South Santiam focus areas.

Pre-acquisition Activities

Task 2.1: Arrange for the NEPA compliance surveys to be conducted on the public lands and lands to be acquired in the focus areas.

Duration: January 2, 2002 – July 31, 2002

- **NEPA compliance surveys have been conducted in the past on the current acquisition sites: Confluence Muddy Creek and Mary's River and Canby Ferry Project Areas. The NEPA checklist was completed for both of these project areas and delivered to BPA in preparation of "closing" on these sites. The contact dates for NMFS, USFWS and SHPO will be included in the NEPA checklist by BPA.**
- **NEPA checklists were completed for the Herbert and Canby projects.**

- **SHPO was contacted and signed off on the Herbert and Canby easement acquisitions.**
- **NEPA Supplemental Analyses were completed for the Herbert and Canby projects. Much discussion occurred with BPA NEPA staff in preparation of closing on these two properties.**
- **All other NEPA documents were sent to BPA for “closing” of the two projects mentioned above.**
- **NEPA compliance surveys were scheduled to begin on the Crocker property during the 2nd quarter but they had to be postponed at the farmer’s request. The NEPA surveys were conducted during the third quarter following harvest of the grass seed. A Supplemental Analysis was completed for the project area by BPA and the level 1 Hazardous Materials survey was conducted by a contractor for Lane County.**

Task 2.2: Develop baseline HEP estimates for lands to be acquired.

Duration: Periodically from October 1, 2001 – September 30, 2002

- **The baseline HEP estimates for the Confluence Muddy Creek and Mary’s River and Canby Ferry Project Areas were included in the “closing” packet sent to BPA.**
- **The baseline HEP surveys for Crocker was conducted by the Regional HEP Team in the final quarter of the contract period. Results are yet to be received. See Tasks 1.1 and 3.4 for further information.**

Task 2.3: Conduct background work, coordination, and real estate transaction processes such as appraisals, comparable sales, title searches, options, easements, and management agreements and purchases of key parcels within the focus areas.

Duration: Periodically from October 1, 2001 – September 30, 2002

- **Discussions and meetings occurred with Lane County Public Works-Roads, Realty and Waste Management divisions, McKenzie River Trust(MRT), FBP and Oregon Departments of Justice regarding the Crocker property. Topics of discussion included the Appraisal, Options to Purchase, Conservation Easement, and real estate processes. Lane County Board of Commissioners adopted the proposed plan for exercising the county’s Option to Purchase. Numerous reviews of the draft documents occurred .**

- **Discussions occurred with the River Network, Trust for Public Land (TPL), Marion County, and the landowner regarding a variety of real estate work to be completed and the transfer of those activities to the TPL in the Stayton area along the North Santiam River.**
- **An appraisal was completed for the Stayton Island site.**
- **Discussion of the Crocker property appraisal and amendments occurred with the county. The appraisal was sent to BPA for review.**
- **Held a public hearing on the Canby Landing easement on 1/22/02 in Canby.**
- **Held a public hearing on the Confluence Muddy Creek/Mary's River easement on 3/14/02 in Corvallis.**
- **Final closing papers were assembled for the Herbert and Canby projects and multiple copies were sent to BPA. Much work was done by BPA staff and communication occurred with TPL, BPA, and ODFW staff in preparation of closing.**
- **Final Purchase Agreements, Memoranda of Agreement, and Conservation Easement documents were produced for Herbert and Canby projects. All were reviewed, approved and signed by the cities', BPA, TPL, and State of Oregon legal and realty staff.**
- **Closing on the Herbert and Canby projects occurred. A great deal of facilitation happened between ODFW, TPL, City of Corvallis, City of Canby, and BPA staff in preparation of closing. Numerous email, conversations, and meetings occurred.**
- **Discussions occurred with the Trust for Public Land (TPL), Marion County, and the landowner regarding a variety of real estate work to be completed on the Koenig project area on the North Santiam River.**
- **The first site visit to the Upper Abernethy Creek project area was conducted.**
- **Two appraisals were conducted on the Walken property during the last contract period. Mr. Walken approached Lane County apparently to explore whether their appraisal process would reveal additional value. After determining that was not the case Mr. Walken contacted ODFW at the very end of this contract period to re-initiate negotiations. Bringing resolve to this project area would be a priority focus for the next contract period.**
- **All work was completed for the purchase of the conservation easement on the Crocker property except for the signing of the MOA and easement, presentation to**

the ODFW Commission, and compiling of the final closing packet including HEP estimate. This remaining work was put on hold due to the expiration of the contract, uncertainty of future commitments by BPA to the Program and declaration of a hold on all land acquisition projects by the Administrator. Over two years of work has gone into completing this project and Lane County even now holds title to the land. Completing this transaction will be the highest priority for the next contract period provided BPA allows for land acquisition and retains funding for this project area.

- **Several discussions with The Nature Conservancy and Wetlands Joint Venture real estate staff revealed their dis-belief the landowner at the Stout Mountain project area was willing to sell at this point.**
- **Discussions occurred with the McKenzie River Trust regarding future project areas for the FY 2003 proposal including the Green Island complex of 850-1300 acres. If any acquisition projects are allowed as part of the Willamette Basin Mitigation Program in next contract year this will likely be the highest priority following completion of Crocker, Walken, City of Stayton, and Abernathy Creek.**

Task 2.4: Develop a budget reflecting costs of acquisition and/or easements for each parcel as it becomes available for purchase/easement.

Duration: Periodically from October 1, 2001 to September 30, 2002

- **Developed budgets for all potential acquisition and easement projects for next fiscal year and submitted with FY 03 project proposal**
- **Final budgets were developed for the Confluence Muddy Creek/Mary's River and Canby Landing projects and submitted to BPA with the final "closing" packet materials.**
- **Discussions occurred with Lane County regarding the final costs for the Crocker property. The wetland delineation undertaken by the county determined what proportion of the site will be suitable for their mitigation needs. Final costs for all parties were estimated.**
- **Preliminary budgets were developed for the Koenig, Stayton Island, White Branch Creek(upper McKenzie River), Miller(lower McKenzie River), Upper Abernathy Creek, and Green Island.**

Task 2.5 Develop Intergovernmental Contracts to transfer funds to accomplish 2.3.

Duration: Periodically from October 1, 2001 to September 30, 2002

- **BPA transferred the funds directly into Escrow for the Herbert and Canby projects. ODFW will not bill BPA for those two easement acquisitions accordingly and it was unnecessary to develop separate IGCs.**
- **BPA de-obligated all of the \$1.8M in acquisition funds from the contract following the contract expiration. This included the funds for the Herbert and Canby project areas which had already been spent.**

Management Plan Activities

Task 2.6 Conduct baseline HEP surveys on acquired lands and prepare reports.

Duration: March 4, 2002 – August 30, 2002

- **This task was undertaken by the Regional HEP Team near the end of the contract period. Please see Tasks 1.1 and 3.5 for further information.**

Task 2.7 Develop specific habitat management plans and budgets for each acquired parcel or for each parcel to be improved.

Duration: Periodically from October 1, 2001 to September 30, 2002; but within 1 year of acquisition.

- **A draft of the contract for Big Island management planning was developed by the McKenzie River Trust and discussed towards the end of the contract period. A second draft will be produced by the MRT. The discovery of a significant population of Oregon chub on-site will be a primary consideration during management planning.**
- **Management planning for the Big Island, Canby, Corvallis and Sorenson properties will be priority actions for the next contract year if BPA funds are provided.**

Management Plan Implementation Activities

Task 2.8 Develop Intergovernmental Contracts to transfer funds to accomplish 2.6.

Duration: Monthly from October 1, 2001 to September 30, 2002

- **A draft contract was reviewed for the Rock Island project area and was advertised on the competitive bid web site. Coordination with Metro on several aspects of contracting and project logistics also occurred.**
- **The Rock Island contract was completed, signed, implemented and closed out during the reporting period.**
- **South Pasture and Sorenson projects were conducted under the existing contracts. An amendment to include additional projects in these areas was drafted. It was not possible to implement the amendment due to the uncertainty of future BPA funds.**

Task 2.9 Implement habitat improvement measures such as: wetland development, vegetation planting, and non-native vegetation removal.

Duration: October 1, 2001 - January 15, 2002 & July1, 2002 – August 30, 2002

- **Non-native vegetation removal occurred on the Rock Island project area during the reporting period. Approximately 20 acres of English ivy were treated on the island portion of the 60 acre property owned by Metro. The contractor did a good job and ivy mortality appears to be high. More monitoring will occur later this summer and through to next year. Some follow-up treatment is anticipated this winter especially in fringe areas and locales where a high percentage of native species are apparent.**
- **Portions of the South Pasture and Sorenson properties were mowed to reduce competition between planted trees and non-native grasses. The thatch was left in place on the Sorenson property and will be used as mulch for newly planted areas this fall. A contractor was hired to do half of this work and equipment was rented for the other sequence.**
- **The remaining portions of the Sorenson property and next section of the South Pasture project area were not planted in the fall of 2002/3 due to the lapse in the contract during the months of October and November. The uncertainty of the future**

contract, lack of clarity of BPA's desires for the contract and short extension period did not allow for the planning necessary to implement these actions.

Objective 3

Planning and coordination. Evaluate lands available for acquisition to determine if they fit the needs of BPA.

Task 3.1: Use GAP analysis and other analytical techniques to make determinations of fit of potential project areas and focus areas.

Duration: Periodically from October 1, 2001 to September 30, 2002

- **Analysis of the Stayton Island, White Branch Creek, Miller, Upper Abernethy Creek, River Island(lower Clackamas River), Multnomah Channel, Kellogg Creek, and Oxbow(lower McKenzie River) potential project areas occurred during this reporting period. This involved reviewing current and historic photographs, land use, adjacent land ownership, availability for future enhancement on adjacent lands, condition of fish and wildlife habitats, current and potential utilization by fish and wildlife populations, juxtaposition to similar habitat, contribution to natural physical processes, and others.**

Task 3.2: Participate in CBFWA meetings including the Anadromous Fish, Resident Fish, Wildlife, and Habitat Caucus', and Subbasin Planning Teams.

Duration: Monthly from October 1, 2001 to September 30, 2002

- **Attended the following CBFWA meetings or conference calls:
Willamette Basin Summary Implementation Team, Portland 9/05/01, 9/28/01
Lower Columbia Subbasin Meeting, Portland 9/18/01
CBFWA Wildlife Budget Meeting, Portland 12/4/01
Lower Columbia River and Estuary ISRP Field Tours in Oregon and Washington-2/19/02
Willamette ISRP Field Tour-2/20/02
Lower Columbia ISRP Presentations, Portland-2/21 & 2/22/02
Wildlife Committee- Portland 2/26 & 2/27/02, 4/18/02, 6/20/02, Spokane 3/20/02 & 5/22/02, Eugene 6/21/02
Lower Columbia River and Estuary Provincial Review, Portland-4/9 & 4/10/02
MMG Meeting-4/11/02
Subbasin Planning Workshop, Portland-4/16/02
Monitoring and Evaluation Workshop-Portland 4/17/02
Anadromous Fish Committee, Portland-4/22/02**

NWPPC FY 02 Budget Coordination, Portland-4/25/02
NWPPC Meeting, Bend-6/11 & 6/12/02
BPA Watershed Workshop, Eugene -6/17 & 6/18/02
Lower Columbia River and Estuary Budget Meeting, Portland-6/26/02
Mainstem/Systemwide Presentations -7/17/02, 9/24/02-OWC proposal
Lower Columbia River and Estuary Budget Meeting, Portland-6/26/02, 7/31/02
OR Subbasin Planning, Portland 6/14/02, 8/9/02, 9/5/02, 9/13/02, 9/19/02
NWPPC Monthly Meeting, Montana 8/13 & 8/14/02, 12/11/02, 12/19/02
NWPPC Coordination Meeting, Portland 8/27/02, 12/5/02
CBFWA MMG Meeting, Portland 8/27/02, 9/12/02

Task 3.3: Participate in OWC meetings and work sessions.

Duration: Monthly from October 1, 2001 to September 30, 2002

- **Attended the following OWC meetings or conference calls:**
Portland-12/13/01
Bend -1/17/02
Portland-7/02/02
Clackamas-8/28/02

Task 3.4: Coordinate with Willamette basin governmental, private, business, and public organizations involved with mitigation and habitat improvement projects. Emphasis will be with those organizations identified as partners in previous phases of the program.

Duration: October 1, 2001 to September 30, 2002

- **Met numerous times and worked with a host of organizations on the Willamette Basin Subbasin Summary. Assisted in gathering information and writing sections of the summary which was completed and presented to CBFWA and the NWPPC at the end of 2001.**
- **Met with Marion County Parks and River Network regarding the Koenig project transfer to TPL and real estate issues that need to be addressed. Multiple phone conversations as well.**
- **Meeting with Lane County Realty, Waste Management and legal counsel regarding the Crocker Property Options to Purchase, Conservation Easement, Title III funds and Management Planning. Numerous phone conversations.**
- **Met with TPL, City of Canby and legal counsel regarding Option to Purchase, Conservation Easement and Management Planning. Weekly phone conversations and a variety of meetings.**

- Meeting with Metro regarding joint potential future projects including Rock Island, River Island, Multnomah Channel and other. Several conversations about Rock island restoration planning.
- Participated and presented talk at the Willamette Basin U.S. Army Corps of Engineers General Investigation meetings regarding interest, potential participants and related projects in the basin. Additional meetings focused on work products and tasks associated with the Willamette Basin Restoration Study.
- Met with the Middle Fork and Coast Fork Willamette River watershed council coordinators and USCOE representatives regarding the Willamette Basin Feasibility Study. Roles, products and timetables were discussed.
- Met with the MRT regarding project prioritization for the next work year. Several conversations regarding project tasks related to Big Island, White Branch Creek, Green Island, and other McKenzie River projects.
- Attended meeting between the City of Springfield and USACOE regarding the Springfield Millrace Feasibility Study.
- Met with representatives from the City of Corvallis, TPL and Greenbelt Land Trust regarding the Confluence of Muddy Creek/Mary's River easement, future management issues, and potential additions. Numerous discussions with TPL regarding "closing".
- Multiple phone conversations occurred with TPL regarding progress on the Koenig and Stayton Island project areas.
- Coordinated and participated in site visits to several Willamette Basin Mitigation Program project areas and Willow Creek project area for CBFWA Wildlife Committee members.
- Multiple meetings, conversations and a site visit were conducted in preparation and execution of the Rock Island habitat enhancement contract.
- Participated in meeting and site visits regarding BPA watershed projects. This included an on-site presentation and overview tour of the Big Island project area.
- Participated in several workshops and meetings involving Lower Columbia and Estuary projects funded by and submitted to BPA for funding during the quarter. A great deal of data sharing and outreach occurred including across state boundaries.

This included site visits to Willamette Basin projects including the Big Island project area.

Task 3.5: Continue to develop standards for determining habitat crediting for projects in the Willamette basin. This will involve coordination and consultation with the BPA, loss assessments, and other documents.

Duration: April 1, 2002 – July 12, 2002

- **During the contract period a Regional HEP Team was formed and funded by BPA to travel to various regions to conduct HEP sampling and compile results. The Team was supposed to schedule site visits to the Willamette Basin during the second quarter of the contract period. The visits were delayed and HEP work did not occur until late in August. ODFW has not been contacted by the HEP Team since their field visits and still does not have results from their work. Since this work was done so late in the contract period and results are outstanding further discussion and developing standards for crediting will need to occur during the next contract cycle.**

Task 3.6: Conduct discussions and negotiations with U.S. Forest Service, Bureau of Land Management, Oregon Department of Forestry, private timberland owners, and others exploring potential habitat enhancement projects, changes to land configuration and ownership, fish passage projects, and general land management in the areas near the federal hydro-electric dams and reservoirs in the Willamette Basin.

Duration: October 1, 2001 to September 30, 2002

- **Discussions with representatives from the Willamette and Umpqua National Forests were held in conjunction with the USACOE Willamette Basin Floodplain Study. Preliminary work was focused on describing the programs and opportunities that may exist to partner on existing projects and plan for future projects. Some discussion of funding sources and potential matching of funds also occurred. The best possibility for inclusion of the federal lands will come through the Corps study and potential future funding of land projects combined with BPA mitigation actions if funding is provided in the next contract. There is much uncertainty what of the FY 2003 project proposal can be funded if acquisition funds from 02 are not carried over. Funds for the Crocker, Walken and other acquisition sites, if completed, would have to come from the planning dollars associated with the COE study without carryover. This would reduce the ability to partner with the Corps and other federal land managers and eliminate the possibility of Corps funding to match with BPA.**

- **The 50 acre White Branch Creek project area in the upper McKenzie River basin is bordered on three sides and would likely be owned by the U.S. Forest Service. Discussions and negotiations occurred with the MRT and between MRT and USFS. The acquisition turned out to be funded entirely by the USFS so BPA funds were not necessary. Restoration work may be planned in the future for which BPA could receive credit if Willamette Basin staff are involved. One possible limitation to BPA and USFS partnering on habitat protection is the USFS' desire to not have limitations such as conservation easements placed on property they hold in fee. This was revealed during the White Branch Creek project planning activities. In addition, the draft BPA policy of funding projects on federal land may prohibit partnerships.**

Objective 4

Conduct project monitoring and evaluation activities on the mitigation lands. This involves site visits to monitor site disposition, habitat restoration evaluation, and fish and wildlife status monitoring.

Task 4.1: Determine changes to habitats on mitigation project and focus areas using current and historic maps and photos and site visits.

Duration: Periodically from October 1, 2001 – September 30, 2002 but prior to and following habitat enhancements

- **Current and historic photography was updated and scanned for current and proposed project areas. Habitat changes were identified at future project areas. A map library was created in the GIS for each project area depicting current habitat conditions and potential future conditions.**
- **Presented changes to Canby Ferry Project Area and Big Island project to ISRP, CBFWA, Council and public during lower Columbia Project Review field tours and Willamette Basin Mitigation Program presentation.**
- **Current photography was obtained for old and new project areas to keep data sources relevant and to track changes that may have occurred to habitat features.**

Task 4.2: Implement fish and wildlife monitoring protocols encouraged or approved by the BPA, ISRP and CBFWA Wildlife Caucus for determining change to populations resulting from mitigation activities.

Duration: Periodically from October 1, 2001 to September 30, 2002 but prior to and following habitat enhancements

- **Monitoring of the trees in the re-vegetated areas of the Sorenson project area occurred. Data indicate a survival rate of approximately 76% which is considered good to better than average for this type of restoration technique.**
- **When this contract was structured in 2001 it was anticipated that the Research, Monitoring and Evaluation workgroup would be developing guidance for protocols and surveys for priority species. However, no guidance has yet come from the R, M, & E group, ISRP, BPA or Wildlife Caucus. It is anticipated that this is one area ODFW will work with BPA and the other groups to establish what surveys should be conducted. Since there are so many HEP Target Species identified in the Willamette Basin loss assessments it will be important to choose a subset of species to maintain reasonable survey costs.**

Objective 5

Prepare on-going progress reports and a final report with the findings of the project.

Task 5.1: Prepare and submit quarterly reports to BPA.

Duration: Reports due on December 31, 2001, March 31, 2002, June 30, 2002, and August 30, 2002.

- **Four quarterly reports were produced.**

Task 5.2: Produce annual report for 2002.

Duration: September 1 – September 30, 2002

- **This task was completed during the reporting period.**