



StreamNet Project

BPA Project No.: 198810804

Fiscal Year 2006 First Quarter Progress Report

October 1, 2005 through December 31, 2006

Bruce Schmidt

Pacific States Marine Fisheries Commission

Cooperators

Phil Roger, Columbia River Intertribal Fish Commission

Bart Butterfield, Idaho Department of Fish and Game

Janet Hess-Herbert, Montana Fish Wildlife and Parks

Cedric Cooney, Oregon Department of Fish and Wildlife

Steve Pastor, U.S. Fish and Wildlife Service

Dick O'Connor, Washington Department of Fish and Wildlife

Table of Contents

Introduction	I-1
Summary of Accomplishments by Work Element	I-2
Detailed Accomplishments by Milestone	2
WE 159 Data Development	2
WE 160 Database Management	17
WE 161 Data Dissemination	26
WE 118 Coordination	33
WE 99 Professional and Public Development	37
WE 119 Program Administration	38
WE 141 Quarterly Reports	42
WE 132 Annual Report	44
WE 999 Work Accomplished Outside of the SOW	45

Introduction

StreamNet is a cooperative, multi-agency data compilation and data management project authorized by the Northwest Power Planning Council's Fish and Wildlife Program (FWP) and is funded primarily by the Bonneville Power Administration. The project is administered by the Pacific States Marine Fisheries Commission (PSMFC). Three fourths of the project consists of sub-projects within the state fish and wildlife agencies, Columbia River Intertribal Fish Commission and the US Fish and Wildlife Service to develop databases within the respective agencies and to facilitate data transfer regionally. The remaining fourth consists of the regional staff and the centralized database at PSMFC.

During the first quarter of Fiscal Year 2006 (FY-06), StreamNet's cooperating projects all made significant progress toward meeting work objectives detailed in the annual Statement of Work (SOW), available at http://www.streamnet.org/about-sn/project_management.html. General accomplishments included:

- Following an extensive focus on Quality Assurance reviews of existing data categories in FY-05, efforts this year refocused on updating data.
- Routine maintenance and upkeep of the many data systems (hardware and software) at all levels of the project continued.

- Data dissemination continued through the online query and map applications, as well as through responses to numerous direct requests for data and information.
- The StreamNet Library continued providing archive services for data source documents as well as delivering full library services to patrons.
- Reporting emphasis is switching to providing broad summary information through Bonneville Power Administration's (BPA's) Pisces application. The FY-05 Annual Summary Report was filed through Pisces, but the detailed Fourth Quarter Progress Report was submitted as in past quarters. This first quarter report may be the last detailed quarterly progress report, with future quarterly reports filed as Pisces Status Reports only. We plan to expand the FY-06 Annual Report into a fully detailed report rather than using the abbreviated brochure format of previous years to make up for the loss of detail in future quarterly reports.
- Routine project administration continued at all levels of the project, with significant effort spent on developing new proposals for work through the FY 07-09 Solicitation.

Summary of accomplishments in the First Quarter, Fiscal Year 2006, by work element

Work Element 159: Data Development

Data development activities (data acquisition, georeferencing, formatting) constituted a large portion of effort by the StreamNet partner agencies during the first quarter. Specific highlight activities included:

The Regional component of the StreamNet Project at PSMFC requested and received barriers data (primarily culverts) from Region 6 of the US Forest Service (Oregon and Washington) and passed the data to ODFW and WDFW StreamNet staffs. These data will be added to the StreamNet database after georeferencing, which will take significant effort. They coordinated with WDFW StreamNet to prepare their 24K hydrography for inclusion in a regional base layer. Staff assisted WDFW StreamNet personnel in submittal of a data set for returns of anadromous fishes to the Lewis River basin. Data sets added to the Independent Data Sets searchable archive included a water quality data set for the Duck Valley Indian Reservation (Idaho/Nevada border), a link to the US Fish and Wildlife Service's images library, and a macroinvertebrates database from Oregon DEQ. The macroinvertebrates data set was the result of collaboration several years ago, and discussions will continue on fostering data sharing for macroinvertebrate information, particularly for non-governmental groups, into the future.

IDFG StreamNet continued work on westslope and Yellowstone cutthroat trout distribution, with data exchange expected next quarter. After completing a review of redd count trends and data last fiscal year, an updated data set that replaced all the existing IDFG records in the StreamNet database and covered data up through the 2004 field season was exchanged. Work continued on locating individual

hatchery release sites by IDFG StreamNet and Fisheries Bureau staff. Compilation of the 2005 field season hatchery return data proceeded during the quarter. Streams for the upper Snake River in Wyoming and the Bear River in Utah were added to the hydrography. IDFG biologists commonly conduct work in these areas outside the Idaho state line and the data are relevant to studies in the entirety of the watersheds. Compilation of the 2005 field season age composition data proceeded during the quarter.

MFWP StreamNet continued data development work for multiple data categories and exchanged data updates for data related to resident fish abundance, adult abundance, hatchery contacts, habitat restoration projects, and genetics. Reference documents for the exchanged data were submitted to the StreamNet Library.

ODFW StreamNet worked on updating the 1:100,000 (100K) hydrography, and progress continued toward establishing an agreed upon approach to address 1:24,000 (24K) hydrography development and the generation of linear event data for the Columbia Basin's 24K scale fish distribution. Data acquisition efforts were lower than planned because of a shift in ODFW priorities toward data management support for Recovery Planning efforts. This work was supported by non-StreamNet funding, and is described later in this report. New carcass placement, age and barrier data were acquired, and the carcass placement data were made available online to the public.

WDFW StreamNet transferred the WDFW salmon, steelhead, and bull trout distribution and use information from the current WDFW 24K hydrography layer to the new StreamNet mixed scale layer for the Columbia Basin and the remainder of Washington State, with exchange to PSMFC expected during the second quarter. All 2004 natural spawn escapement data were completed and exchanged. Per request, unrolled hatchery release data were submitted to the StreamNet Data Manager. Seven updated hatchery return trends and 299 updated hatchery return records were exchanged to PSMFC, encompassing all completed and corrected WDFW hatchery return records through 2004. The mixed scale hydrography was completed for the Washington portion of the Columbia Basin, including all 100K streams, all additional 24K named streams, and all 24K scale unnamed streams with associated StreamNet data. The layer will be exchanged to PSMFC during the Second Quarter. All lower Columbia River 2005 smolt trap data sheets were entered and proofed, transferred from Excel into the Access database and queries were performed to analyze the data sets, build tables, double check numbers and send to Regional Biologists to run population estimates. 2004 age data for the natural spawn escapement data set, plus 770 new age records associated with hatchery return, were completed and exchanged, with all the necessary corrections made for the new data format.

FWS StreamNet performed preliminary processing of calendar year 2005 hatchery release information from the national fish hatcheries. Hatchery return information for the 2005 return year was received and added to the CRiS Returns file. Staffing changes at the national fish hatcheries were captured in the StreamNet Hatchery Facilities file. Return and Age data were prepared for transformation to the StreamNet Data Exchange Format.

CRITFC StreamNet data development efforts centered around the StreamNet Library, where data source documents and other reports and publications were received and catalogued. Updating and management tasks related to field data depend on field sampling during the first quarter, and as a result, data input will not be received until the second or third quarters for uploading to the central StreamNet system.

Work Element 160: Database Management

Database management activities continued for all project partners during the first quarter, including routine system administration and management of all hardware and software. Databases were maintained and managed for all data acquired by the partner agencies and also in the centralized portion of the project at PSMFC. Specific highlight activities performed by the project partners included:

PSMFC StreamNet upgraded all GIS software to the latest version and updated the locational cross-referencing tables for new data submitted during the quarter. Apache and ColdFusion updates were applied, and Windows 2000 Server updates were made. We continue to improve web server performance and reduce web errors and problems caused by web robots and attacks. New XML output was added to several query data categories improving the system interoperability with StreamNet partners. Data exchange standards were essentially steady during the quarter, with coding added for several data types. A slight change to the Age data DEF was made to allow for data that did not have the detail that was anticipated. A new version of the full DEF should be published in the second quarter. The web query system was updated for several data categories, including Hatchery Returns, to accommodate previous changes in the DEF. Data submitted to the StreamNet database was included in the GIS library and cross referenced to enable spatial filtering via the web query system. Data was added to the ArcIMS applications and the library of downloadable GIS layers. The most significant updates to the StreamNet database included an entire replacement of Chinook and steelhead redd count data in Idaho with over 6,700 records identifying redd counts by transect instead of more general summarizations. A considerable effort was made to improve the completeness of location geo-referencing tables that are used by the web query system to focus data searches by state, county, province, subbasin, HUC, etc. The species code table was updated.

IDFG StreamNet installed and configured a new database server and began migrating the existing fisheries database to the new server. The .Net interfaces for the Spawning Ground Survey and the Idaho StreamNet databases were completed. A review and restructuring of all redd count trends, redd count data, hatchery returns and age composition databases was completed, resulting in much greater detail for redd count data.

MFWP StreamNet responsibilities for system administration were assumed by MFWP IT staff for StreamNet staff located at the Montana State Library. The geodatabase model for managing spatial data was explored for possible use in the future.

ODFW StreamNet continued its focus on QA/QC of existing data, although a significant amount of some staff time was diverted from this effort because of a shift in ODFW priorities toward data management support for Recovery Planning efforts. This work was supported by non-StreamNet funding, and is described later in this report. Work to improve and refine QA/QC protocol documents also continued as error-checking strategies were added or improved, and employed. ODFW continued to make strides toward modernizing data management capabilities through the use of SQL Server, ArcSDE and ArcIMS software packages. Significant progress was made in migrating websites maintained by NRIMP from the old MySQL Web Application Framework into the new WebFX framework based on MS SQL Server. Work on the agency's geo-database to store ODFW spatial datasets, as well as other common base data, continued. Other work this quarter related to data and database management infrastructure improvements, including tool, website, and database development. Work on the corporate information system continued, with progress on a number of disparate Windows-based components being made. Staff also continued to support CSMEP data inventory efforts, entering 65 Grande Ronde spring Chinook data records into the CSMEP database and updating existing records when warranted.

WDFW StreamNet created a cross-reference of San Poil Basin (WRIA 52) Stream Catalog codes and LLIDs to educate everyone about the assignments made in this basin. Since the WRIA 52 effort was a success, a cross-reference for Columbia Basin Stream Catalog codes and LLIDs was started in the remaining Washington basins. A new Access version of the newest Habitat Restoration Projects DEF was developed internally to aid conversion of agency data.

FWS StreamNet updated its virus, spyware, and adware protections. CRiS Age programs were updated to meet new printer limitations. QA/QC was performed on Returns and Age data. These checks are built into processing programs, and are performed upon review of output. The project leader functioned as a primary participant in discussions related to finalizing the Age DEF.

CRITFC StreamNet Library staff continued to work with new catalog software to improve access to the collections and searchability via the Internet. Library catalog records were updated, and corrected when necessary. The CRITFC StreamNet Project Leader met with tribal biologists to scope out their needs for data management tools. A high priority need was identified and an ad hoc group continues work to describe the need for each tribe.

Work Element 161: Data Dissemination

Primary data dissemination from the StreamNet databases continued through the online tabular data query system and the interactive map applications. Project participants also responded to direct requests for information during the quarter (Tables 1, 2 and 3).

Table 1. Summary of responses to direct data/information request by StreamNet members during the first quarter, by type of request. These do not include data obtained on-line.

<u>Type of request</u>	<u>CRITFC</u>	<u>IDFG</u>	<u>MFWP</u>	<u>ODFW</u>	<u>PSMFC</u>	<u>WDFW</u>	<u>Total</u>
Data request		43		10	3	6	62
General fish information					1		1
GIS data / map		13	5	2	2	13	35
Hardware / software technical support		1		7			8
Help finding information					1	2	3
Help with data interpretation / analysis					1	1	2
Library / Documents	131	1		6	1		139
Other				4	2		6
Report error or problem					4		4
Total	131	58	5	29	15	22	260

Table 2. Summary of responses to direct data/information requests, first quarter, by source of request. These do not include data obtained on-line.

<u>Source of request</u>	<u>CRITFC</u>	<u>IDFG</u>	<u>MFWP</u>	<u>ODFW</u>	<u>PSMFC</u>	<u>WDFW</u>	<u>Total</u>
College / university	23	1			2		26
General public / other				2	2	1	5
Government, county / local				1		1	2
Government, federal	12			3	2	2	19
Government, state	5	18	5	16		11	55
Government, tribal	47	16			3	5	71
Nonprofit organization		2		1	1		4
Industrial/Commercial		1					1
Private consultant	15	20		3	3	2	43
Regional entity	15			2			17
Unknown	14			1	2		17
Watershed council / group							
Total	131	58	5	29	15	22	260

Table 3. Summary of responses to direct data/information requests during the first quarter, by outcome. These do not include data obtained on-line.

<u>Outcome of request</u>	<u>CRITFC</u>	<u>IDFG</u>	<u>MFWP</u>	<u>ODFW</u>	<u>PSMFC</u>	<u>WDFW</u>	<u>Total</u>
Request fully satisfied	128	56	5	10	11	17	227
Request partially satisfied	3	2		7	4	4	20
Referred to other sources				7		1	8
Could not help at all				5			5
Total	131	58	5	29	15	22	260

PSMFC StreamNet staff provided a significant enhancement to the Protected Areas data set via an ftp link. The Protected Areas data set uses non-standard reach codes to indicate locations, which exist only on paper copies of the EPA River Reach Files that were "enhanced" by the Northwest Environmental Database (NED, a StreamNet precursor project) in the late 1980s. Many of the data in the Protected Areas data set can not be deciphered without these reports. The reports were scanned using a new scanner and software at PSMFC to provide a safe backup and to make the reports easily available at <ftp://ftp.streamnet.org/pub/Banach>, and will be made available via the StreamNet Library web site in the future. Use of the centralized StreamNet websites is summarized in Table 4.

Table 4. Use of the StreamNet website in the first quarter, FY-06 (Internal StreamNet use and web crawlers excluded).

	<u>Oct.-05</u>	<u>Nov.-05</u>	<u>Dec.-05</u>
<u>Main Web server</u>			
Total static page requests	259,914	219,188	196,044
Number of visits	23,454	22,505	21,610
Unique visitors	10,017	10,060	8,099
Data query page requests	30,161	31,431	7,764
Unique query sessions	22,607	22,985	1,462
Unique query sessions / hr.			
Data reports viewed	4,245	1,780	1,353
FTP files downloaded	3,489	2,810	1,763
<u>IMS Web Server</u>			
Total IMS page requests	17,219	18,480	22,119
Number of IMS visits	643	623	796
Unique IMS visitors	357	363	382
Mean pages / IMS visit	28	30	28

IDFG StreamNet maintained function of its internal web site system. Project staff assisted the Idaho Supplementation Studies project by merging their juvenile trap data into a single database and created web-based reports of the data.

ODFW StreamNet / NRIMP developed and launched a pilot general purpose ODFW Internet Map Server (IMS) Web site to provide ODFW employees with easy access to agency GIS data in map format. Functionality and content will be enhanced over time to use the site as a vehicle to update data that is exchanged with PSMFC, such as distribution and barrier data, and to serve partner agencies and the public. External websites were maintained and upgraded. For the period of October through December 2005, the web server provided an average of 37,484 page views per month to an average of 3,727 unique IP addresses.

WDFW StreamNet fish and hydrography GIS layers were used by WDFW's Priority Habitats and Species group to respond to 303 data requests, involving 922 maps and 42 digital datasets. Additional data inventory information was provided to CSMEP through entry into the online application, and for habitat related data through the CSMEP spreadsheets.

CRITFC StreamNet Library staff continued to provide traditional library services to patrons, despite the ongoing transition to new library software. Over 130 individual requests for information were serviced, and nearly 100 requests were received from other libraries.

FWS Age and Return data were shared with cooperating agencies as part of routine procedures.

Work Element 118: Coordination

IDFG StreamNet worked with IDFG staff to provide guidance and assistance for internal database development activities.

MFWP StreamNet participated in Statewide Fisheries Management Plan activities, including meetings to discuss future direction. They generated several data matrices for review and 96 reports to assist in gathering information from biologists for the Comprehensive Fish and Wildlife Conservation Plan. A teleconference meeting was held between Fisheries Division staff in the headquarters and FWP Region 1 (Kalispell) and the project manager to discuss the 07-09 Solicitation and how Montana StreamNet staff can better serve other BPA projects and the division.

ODFW StreamNet continued support for the CSMEP effort, including participation in regularly scheduled meetings/calls, and routine maintenance and updating of the CSMEP web application. Currently there are 1,515 records in the CSMEP web application, 65 of which were added this quarter. Oregon StreamNet staff participated in several scheduled NED, PNAMP, and CSMEP meetings. A great deal of collaboration and support took place this quarter with ODFW Recovery Planning efforts, based on a shift in agency

priorities. Coordination with the ODFW Marine Resources Program (MRP) continued, by maintaining and updating the online harvest status tracking system for the 2005 marine sport season. A low level of support to the State of the Salmon inventory effort occurred during the quarter. Staff continued to support the Comprehensive Wildlife Conservation Strategy throughout the quarter, contributing GIS and analytical support to the implementation of Oregon's Comprehensive Wildlife Conservation Strategy. Staff members continued to be active in the GIS Coordination Group in ODFW.

WDFW StreamNet hosted a meeting in Olympia on December 21 for six WDFW managers and the PSMFC StreamNet Project Manager. Current StreamNet work and strategic targeting of future efforts were discussed. For some it was their introduction to the StreamNet Project at WDFW; they found the discussion lively and relevant to current WDFW needs. The project also identified and assessed four habitat restoration funding programs within WDFW for their current data storage methods and held a meeting with three to discuss coordination and data management, where they demonstrated the Restoration Projects database and provided an overview of the regional context for StreamNet.

CRITFC StreamNet formed an ad hoc work group with CRITFC tribes to address critical data management needs in the FY-07 solicitation process. Plans progressed toward developing a project to capture EDT and QHA data developed during subbasin planning. They responded to three requests and questions related to subbasin planning data.

PSMFC StreamNet regional staff continued participation in PNAMP, NED, and other regional data coordination efforts. StreamNet personnel made significant contributions to these efforts, including planning to conduct an inventory of monitoring activities for PNAMP. A comparison matrix was finalized and distributed to summarize the similarities and differences among many of the regional organizations and projects working with monitoring and data management, with the intent of minimizing confusion over purposes and potential overlap. The spreadsheet is available at http://www.streamnet.org/about-sn/project_management.html. The Program Manager also participated in a coordination meeting with WDFW staff members.

Work Element 99: Professional and Public Involvement

PSMFC StreamNet sent out the fifth StreamNet Newsletter to 1,039 email addresses detailing recent news and accomplishments of the project. After deleting undeliverable addresses, there were 971 people signed up to receive StreamNet Newsletters at the end of the quarter. Sign up to receive the StreamNet newsletter at the StreamNet website, www.streamnet.org.

CRITFC StreamNet Library staff continued to improve outreach efforts through working with regional conferences to distribute materials on the library. Library promotional brochures were sent to regional conferences on related topics (Columbia River Conference and the Climate and Fisheries Conference) for distribution to meeting participants.

ODFW StreamNet performed routine outreach using normal modes of communication during the quarter. A presentation on ODFW's IMS site was given to ODFW Wildlife Division managers.

A PowerPoint presentation introducing StreamNet was given to three habitat restoration project funding programs within WDFW explaining the benefits of a data exchange and a brief introduction to StreamNet's habitat restoration database structure.

Work Element 119: Project Management

Routine project management continued for all participants in the project. All project members participated in the quarterly Steering Committee meeting held Oct. 31-Nov. 1. All members participated in conference calls related to regional development of High Level Indicators, which in some cases will be reliant on the kinds of data contained in the StreamNet database or that could be obtained by the project if funded to do so through the FY 2007-2009 solicitation. Members also participated in several conference calls related to development of the FY-2007-209 project proposals. Significant preparatory work was performed by all members of the project to begin development of the proposals, which are due early in the second quarter.

CRITFC StreamNet determined that several years of level-funding constraints without adjustments for inflation have eroded the project's ability to support even a minimal level of supplying tribal data to the StreamNet database. Because of budget reductions in CRITFC'S other FY-06 support, the Database Programmer position might have to be eliminated, which, if that becomes necessary, would prevent the ability to update the data elements they are responsible for.

Work Element 141: Quarterly Reports

All project participants contributed input to the quarterly performance report for the fourth quarter of FY-05. The report was completed and submitted to BPA.

Work Element 132: Annual Report

All project participants entered their respective work summaries into the Pisces Summary Report for FY-05. Bugs in the Pisces application delayed submission slightly. The Pisces report will be used as the basis for developing a more detailed annual report for FY-05, but the focus on the new project solicitation delayed that report until the second quarter.

Detailed accomplishments during the First Quarter, FY-06, by individual milestone

Work Element 159 Submit/Acquire Data

Work Element: 159 Submit/Acquire Data

Title: 1 Conduct site visits to obtain updated data from biologists

Description: Conduct scheduled site visits to offices of biologists in state, tribal and federal agencies to obtain the most recently available field data. This approach is used by only one of the agencies cooperating in the StreamNet project

Deliverable: New data are obtained by the state StreamNet project to update the data categories listed in the other Data Development work element titles.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 MFWP capture fish data through scheduled visits to biologist offices	MFWP will visit MFWP, other state agency and federal fisheries biologists in early 2006 to obtain fisheries field survey data collected during the 2005 field season. Data will include fish distribution; use type; survey, inventory and monitoring of target species; reptiles and amphibians and nongame species. They will update the data tables in MFISH with the new data collected from biologists and documents, reports and electronic files assigning data LLID for stream routes and lakes. The update will be done for the entire state. Additional fields may be collected for species undergoing a species assessment. This is the primary method of obtaining data for StreamNet in Montana, in contrast to the other state StreamNet components.	Data meetings are scheduled to occur in the second quarter.

Work Element: 159 Submit/Acquire Data

Title: 2 Develop anadromous fish distribution data

Description: Document the occurrence, distribution and life history characteristics of anadromous fish species. Efforts will be made to utilize the current mixed scale hydrography for these data, with intent to migrate to 24K when a regionally consistent 24K routed hydrography becomes available. Maintenance of this high priority data set will continue. The state StreamNet sub-projects will maintain the existing data on anadromous fish distribution and habitat use in their respective states. New distribution information will be incorporated as they become available. Updated distribution data will be conveyed ("exchanged") to the regional StreamNet database at PSMFC, where they will be incorporated into the database.

Deliverable: Data on the distribution and habitat use of anadromous fish are maintained, and updated as possible, by each of the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC and made available through the online data query system.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

3 WDFW development of anadromous fish distribution data

WDFW will convert the newest Washington anadromous fish distribution data to StreamNet format and exchange data when completed.

Transfer of the WDFW anadromous fish information from the current WDFW 1:24,000 scale hydrography layer to the new StreamNet mixed scale layer was completed and reviewed for the Columbia Basin and the remainder of Washington State by the Fish GIS Manager. Additional updates were also entered during this quarter as a result of the new EPA Water Quality Rules along with continuing adjustments due to error correction and/or new information. This new layer will be the standard WDFW layer and will be used for SalmonScape. The agency release date is early January. Delivery to StreamNet is expected during the Second Quarter.

Delivery of the data to StreamNet cannot happen until the Mixed Scale Hydrography is finalized and submitted to StreamNet.

The Location Data Manager defined a way to test for unallowable event overlaps on all species at the same time. Previous tools required a separate test for each species

Work Element: 159 Submit/Acquire Data

Title: 3 Develop resident fish distribution data (top priority for MFWP, lower priority for others)

Description: Document the occurrence, distribution and life history characteristics of resident fish species, at the most current available hydrography scale. Existing resident fish distribution will be maintained, and project participants will begin expanding data for additional species. This is high priority for Montana, and new data will be developed by the other states as time allows. Updated distribution data will be exchanged to the regional StreamNet database at PSMFC, where they will be incorporated into the database.

Deliverable: Data on the distribution and habitat use of resident fish (species of primary interest) are maintained, and updated as possible, by each of the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC.

Milestone Title	Milestone	Accomplishments in the First Quarter
1 IDFG development and exchange of resident fish distribution data	IDFG, on an ongoing and opportunistic basis, will capture and update resident fish distributions and submit them to regional StreamNet in the DEF tied to the current hydrography scale.	Work continued on distribution for Westslope Cutthroat and Yellowstone Cutthroat. Submission is expected next quarter.
2 MFWP development and exchange of resident fish distribution data	MFWP will update, maintain, correct and exchange resident fish distribution and documentation information with the regional StreamNet database in the DEF tied to the current and/or appropriate hydrography scale, based on the information obtained through the scheduled visits to biologists offices.	439 FishPres records were updated or created in the first quarter.

4	ODFW development and exchange of resident fish distribution data	ODFW, on an ongoing and opportunistic basis, will update, maintain, correct and exchange resident fish distribution and documentation information with the regional StreamNet database in the DEF tied to the current and/or appropriate hydrography scale.	We continued to pursue and evaluate existing native non-game observations from the Oregon Natural Heritage Information Center.
5	WDFW development of resident fish (bull trout) distribution data	WDFW will convert the newest Washington bull trout distribution data, including updates from the statewide 5-year review completed in 2004, to StreamNet format and exchange data when completed.	<p>Transfer of the WDFW resident PHS (Priority Habitat Species) fish information from the current WDFW 1:24,000 scale hydrography layer to the new StreamNet mixed scale layer was completed and reviewed for the Columbia Basin and the remainder of Washington State. Additional updates were also entered for bull trout during this quarter as a result of the new EPA Water Quality Rules along with continuing adjustments due to error correction and/or new information. This new layer will be the standard WDFW layer and will be used for SalmonScape. The agency release date is early January. Delivery to StreamNet is expected during the Second Quarter.</p> <p>Delivery of the data to PSMFC cannot happen until the Mixed Scale Hydrography is finalized and submitted.</p> <p>The Location Data Manager continued work on cross-border issues with ODFW StreamNet. She started georeferencing a summary of our biologist's data which presumably supports his claims of presence, spawning and/or rearing for bull trout in the Walla Walla Sub basin. Some troublesome location questions need to be answered and then the results need to be analyzed.</p>

Work Element: 159 Submit/Acquire Data

Title: 4 Develop data for adult abundance in the wild

Description: Develop and maintain (update) information on adult abundance for native fish species, resident and anadromous, including escapement, redd counts, peak spawner counts, trap counts, dam and weir counts, and resident fish populations (where calculated by other agencies). This is a high priority data type. Also included in this data category are data gathered during spawning ground surveys regarding straying of hatchery fish onto spawning areas, i.e., marked/unmarked ratio. These are lower priority under base funding. Updated data will be exchanged with the regional StreamNet database at PSMFC at least once per year.

Deliverable: Data on the abundance of fish (species of primary interest) in the wild are maintained and updated, by each of the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

2	IDFG development of adult abundance data	IDFG will compile the 2005 field season spawner survey and weir count data from IDFG and submit them in the DEF to regional StreamNet.	After completing a review of redd count trends and data, we submitted an updated data set through the 2004 field season that replaced all the existing IDFG records in the StreamNet database. These data now include detail by individual transect and non-index counts.
3	MFWP development of adult abundance data	MFWP will input all 2005 stream and lake fish survey data into MFISH, including trend, count and references. The data will include all fish surveys, including one time, index streams, lake netting and all other types. Data will be provided as an independent data set since the current DEF isn't established for resident fish surveys. If a DEF is available, the data will be exchanged.	2,158 fish survey records were added or updated in the first quarter from the 2004 field season.
4	ODFW development of adult abundance data, first exchange	ODFW will maintain existing anadromous, resident, and non-game abundance and index trends. Two exchanges of data are planned.	Routine data compilation efforts were made this quarter.
6	WDFW development of adult abundance data	WDFW will update and enhance the existing natural spawner database (escapement estimates and/or detailed counts) for return year 2004-2005. Convert and exchange data.	<p>The Vancouver data compiler completed and exchanged all 2004 natural spawn escapement data. These data were formatted to comply with the 2005.1 Data Exchange Format and changes to existing data were made to comply with this format.</p> <p>Collection of 2005 escapement data was started. Completed 2005 escapement reports in electronic and hard copy reports have been delivered. Completed statewide escapement reports are not expected until late in the second quarter. Effort was made to contact and collect more eastern WA data sources.</p> <p>The Vancouver data compiler reviewed the 2004 State of Salmon in Watersheds Report to see if there are any data not currently being collected.</p> <p>The Stream Survey data set is continually being populated with historic and current data to meet the needs of both StreamNet and WDFW. There were 2,074 records added in the first quarter to the Stream Survey data set. Both Vancouver staff met with a WDFW database designer to discuss standardizing all Stream Survey databases into one complete data set. We are one step closer to incorporating the Lower Columbia data set into the standardized database.</p> <p>We continued to update the adult trap data set for Cedar Creek and sent updates to the Regional Biologist. There were 794 new records added to the data set. Queries were run for the Regional Biologist to complete reports for budget approvals.</p>

Work Element: 159 Submit/Acquire Data

Title: 5 Develop hatchery release data

Description: The hatchery release data category is currently undergoing revision by the StreamNet project. Release data have in the past been obtained from the Regional Mark Information System (RMIS). However, a significant number of release records in RMIS is aggregated into Pacific Salmon Commission codes, which combine ("roll up") multiple locations and release dates so the data can not be assigned a specific release location. StreamNet is in the process of obtaining hatchery release information based on individual release locations and times. During this year, we will initiate a new system of obtaining release data directly from the management agencies and make them available regionally as soon as possible, although some individual release locations may not be available this year. Release data for resident species under base funding will be developed only where the data are readily available (primarily Montana). Efforts will be made to complete cross references between PSC release codes and LLID stream location identifiers. This is a high priority data set.

Deliverable: The Oregon, Washington, Idaho and FWS StreamNet cooperators obtain available individual hatchery release data for anadromous fish before being rolled up into PSC codes. These data are exchanged with the central database at PSMFC, where they are organized for public dissemination.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 FWS development of hatchery release data	FWS will acquire and process hatchery release information from national fish hatcheries in the Columbia River Basin and exchange data with the regional StreamNet database.	Preliminary processing of calendar year 2005 release information was performed.
2 IDFG development of hatchery release data	IDFG, on an ongoing basis, will work with IDFG Fisheries staff to identify hatchery release locations and incorporate hatchery release data into StreamNet. Hatchery release locations and data will be exchanged to regional StreamNet.	Ongoing work to locate individual release sites continued by IDFG StreamNet and Fisheries Bureau staff.
5 WDFW development of hatchery release data for anadromous fish	WDFW will convert and exchange pilot unrolled anadromous fish hatchery release data for the 2004 release year.	Per request, the Location Data Manager submitted unrolled release data (without a conversion) to the StreamNet Data Manager. The StreamNet Data Manager wanted to see if the conversion chore is something that he could handle centrally for all agencies.

Work Element: 159 Submit/Acquire Data

Title: 6 Develop hatchery return data

Description: Develop and maintain (update) information on the return, disposition and straying (e.g., from other hatcheries) of adult fish returning to hatcheries, including information on coded wire tags. This is an anadromous related task only. Priority will be placed on updating total return and egg take data through 2003. Development of disposition data is lower priority and would require additional resources. Updated data will be exchanged with the regional StreamNet database at PSMFC at least annually. This is a high priority data set.

Deliverable: Data on the return of anadromous fish to the hatcheries are maintained and updated by the state and FWS StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

1	FWS development of hatchery return data	FWS will receive Fish Removal and Egg files from individual hatcheries, and add summarized data to the Hatchery Returns file. Data will be exchanged with the regional StreamNet database.	Hatchery return information from National Fish Hatcheries for the 2005 return year has been received and was added to the CRiS Returns file.
2	IDFG development of hatchery return data	IDFG will compile the 2005 field season hatchery return data from IDFG and submit in DEF to regional StreamNet.	Compilation of the 2005 field season hatchery return data proceeded during the first quarter.
4	WDFW development of hatchery return data	WDFW will update the existing hatchery return database for return year 2004-2005, convert and exchange data.	The Data Manager delivered 7 updated hatchery return trends and 299 updated hatchery return records. All complete and corrected WDFW hatchery return records through 2004 have been delivered. Work was performed by the Data Manager to correct accounting errors in WDFW hatchery returns data for delivery in the second quarter.

Work Element: 159 Submit/Acquire Data

Title: 7 Develop dam and fish passage facility data (mid-priority)

Description: Data on dam and fish passage facilities will be maintained and updated as necessary and possible by each of the state StreamNet sub-projects. Updated data will be exchanged with the regional StreamNet database at PSMFC. This is a key data set, but mid priority for update under base level funding.

Deliverable: Data on dam and fish passage facilities are maintained and updated by the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

3	ODFW development of dam and fish passage facility data	ODFW, on an ongoing basis, will maintain existing dam and fish passage facilities information. Any updates will be the result of QA/QC efforts and easily incorporated dam and fish passage data.	Data were successfully maintained. No updates were required during the first quarter.
---	--------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

Work Element: 159 Submit/Acquire Data

Title: 8 Develop hatchery facility data (key dataset, update once per year)

Description: Develop and maintain information on anadromous and resident hatchery facilities, including information on location, design, management and authorization. Information will be updated as necessary and exchanged to the regional database at PSMFC. This is a high priority data set.

Deliverable: Data on hatchery facilities are maintained and updated by the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

2	MFWP development of hatchery facility data	MFWP will update the public and private facilities hatchery facilities database once a year and exchange with StreamNet.	Updates to hatchery contact information were made.
3	FWS update the Hatchery Facility table	FWS will collect any revised information on National Fish Hatcheries and submit updates to the regional StreamNet database.	Staffing changes were captured in the StreamNet Hatchery Facilities file.
4	ODFW development of hatchery facility data	ODFW, on an ongoing basis, will maintain and update hatchery facility information, at least once per year as needed, based on errors found in the Oregon hatchery facilities information, including facility location information.	Data were successfully maintained. No updates were required during the first quarter.
5	WDFW development of hatchery facility data	WDFW will update the hatchery database, adding new records and improving field entries for existing records as warranted, convert and exchange data when complete.	Internally we've worked out a better way to store and document hatchery, dam, trap and all related point information in a single geodatabase. We are working through the process to post this info for data requests that come direct to WDFW. StreamNet Hatchery DEF improvements need to be made to better share this info with the StreamNet database as expected in Q2 and relevant staff recently agreed to finalize necessary changes in Q2.

Work Element: 159 Submit/Acquire Data

Title: 9 Develop harvest data

Description: StreamNet has traditionally posted harvest data from in-river sport fisheries. This will continue in FY-06, but we will also explore the availability of ocean / commercial harvest data as estimated by others and determine whether these data can be realistically obtained and standardized for regional distribution. Higher priority is assigned to anadromous species. Updated data will be exchanged to the regional StreamNet database at PSMFC.

Deliverable: Data on in river sport harvest of anadromous species are maintained and updated as possible by the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC. Availability and format of ocean / commercial harvest data are evaluated for future development.

Milestone Title	Milestone	Accomplishments in the First Quarter	
2	ODFW development of harvest data, first data submission	ODFW will maintain existing harvest trends. First of two planned exchanges of data.	Routine data compilation efforts were made this quarter.

Title: 10 Develop hydrography data

Description: Maintain the regionally consistent routed hydrography layer at the 1:100,000 (100K) scale for which StreamNet is the official keeper. This LLID based hydrography has been the basis for georeferencing and displaying locations for all other data in the StreamNet database, and as such is an essential data set. In FY-06 we will continue to maintain these data, but emphasis will shift to development and use of a mixed scale hydrography (100K plus 24K streams that have attached fish data) as an intermediate step toward the eventual conversion to 24K when a regionally consistent routed 24K hydrography becomes available from other entities (potentially several years away).

Deliverable: The 1:100,000 PNW hydrography layer is maintained and updated as needed for internal use and posted on the StreamNet website for use by others. An interim "mixed scale" (100K X 24K) hydrography for use in posting StreamNet data is developed for StreamNet use until the PNW 1:24,000 scale NHD is completed by USGS.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 IDFG maintenance of hydrography for Idaho	IDFG, on an ongoing basis, will maintain and update, as necessary, the 1:100,000 scale hydrography files for Idaho. Prototype LLID routing at 24K will be done on other funding.	Streams for the upper Snake River in Wyoming and the Bear River in Utah were added to the 100K hydrography. IDFG biologists commonly conduct work in these areas outside the Idaho state line and the data are relevant to studies in the entirety of the watersheds.
2 MFWP maintenance of hydrography for Montana	MFWP, using the NHD, will continue to update the routes using the updated NHD layer, including lakes; quality check the cross-reference between the LLID system and MFWP's water code system; and participate in Steering Committee assignments for either the 1:24 K product or the mixed scaled hydrography. NRIS will become the steward of the NHD layers in FY06 and take over maintenance of the layer excluding the stream routes.	Work continued on this ongoing task.
3 MFWP participation in 1:24 K hydrography development	NRIS will become the steward of the NHD for Montana in FY06. MFWP will rely on them for the development of the NHD 1:24 K layer through contracted services.	This task is ongoing by the USGS. Several HUCs still need to be completed in the 24k layer.
4 ODFW maintenance of hydrography for Oregon	ODFW, on an ongoing basis, will maintain and update as necessary the 1:100,000 scale hydrography files for Oregon. They will also contribute to the development of a hybrid (100k - 24K) hydrography layer that will enable display of all distribution data in a linear format	The GIS Analyst updated the 100k hydrography for Bully Creek where two routes needed to be merged into one, and coordinated with Regional StreamNet staff on the change. The GIS Analyst followed up on the cross state hydrography coordination effort with WDFW. He created two DEF-style tables with the goal of addressing issues related to location and accuracy of observation data occurring on the same streams.
5 PSMFC transition to interim "mixed scale" hydrography and monitor development of routed 24k hydro.	The Region will maintain the 100K hydrography and transition to using the interim "mixed scale" hydrography as it becomes available. In particular, this transition will enable StreamNet to display the best available fish distribution data region wide. Progress on the development of a regionally consistent 24k routed hydrography by the USGS and partners will be closely monitored.	The Regional GIS Specialist coordinated with WDFW to prepare their 24K hydrography for inclusion in a regional base layer. Meetings and work sessions are planned in the second quarter specifically to address this issue. The GIS Specialist will also attend a National Hydrography Dataset (NHD) workshop sponsored by the USGS.

- | | | | |
|---|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 | WDFW development of the Washington streams portion of the StreamNet mixed-scale hydrography layer | WDFW will perform minimal maintenance of the 1:100,000 scale hydrography (streams and lakes) layer for Washington state, including the 1:24,000 scale representation of all 1:100,000 scale Washington streams plus 1:24,000 scale named streams plus 1:24,000 scale streams containing StreamNet data. They will include a current copy of the layer with each StreamNet data exchange, with a minimum of at least one hydrography layer exchange each fiscal year. | The mixed scale hydrography has been completed in its first draft for the Washington portion of the Columbia Basin plus the remainder of Washington State. It includes all 1:100,000 scale streams, plus all additional 1:24,000 scale named streams, plus all 1:24,000 scale streams with StreamNet data. The layer was edge matched with the border 1:100,000 scale HUCs of Oregon and Washington. The starting point of the Columbia River was adjusted to Buoy Ten. In addition, the layer has been adjusted in places to match the latest available version of the orthographic photos. The layer will be delivered to the Regional StreamNet database during the second quarter. |
|---|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Work Element: 159 Submit/Acquire Data

Title: 11 Develop data to track habitat restoration / improvement projects

Description: Preliminary work has been completed on developing data related to habitat restoration and improvement projects, but regional priority has not been assigned to StreamNet for developing these data. Even though we have developed an improved DEF for these data, this now is a low priority data type under current base funding. We are ready should a higher priority be assigned by regional entities. We believe that there is not yet a comprehensive compilation of all of this kind of data in the region, and we suggest that a project be tasked with obtaining this information from the many sources of such data, including OWEB, WSRFB, US Forest Service, BLM, tribes, and the PCSRF database, updating it annually, and providing it in a regionally standardized format.

Deliverable: Existing data on habitat restoration / improvement projects are maintained.

Milestone Title	Milestone	Accomplishments in the First Quarter
2	MFWP development of user interface for Fisheries Division Restoration Program	MFWP will provide technical and user interface development to the Fisheries Division Future Fisheries (FF) Program, the Fisheries Restoration Program for the division. Coordinate with FF Field staff and modify the user interface as requested. Although considered a low priority for the region, this is a high priority for MFWP; a legislated mandated program is in place with grant awards provided annually for fisheries restoration projects that MFWP administers.
3	MFWP development and exchange of habitat projects tracking data	MFWP staff will provide data entry for fisheries restoration projects from federal and state agencies that are not fully funded by the Future Fisheries Program. Data will be exchanged on an annual basis unless increased activity in the database use warrants a mid-year exchange.

4	MFWP participate in coordination efforts to centralize all Montana restoration projects	MFWP staff will participate in an ad hoc committee made up of numerous state, federal, private and local entities interested in creating a statewide database for all stream and lake restoration projects.	FWP is not the lead on this project but will participate if activity occurs.
5	ODFW maintenance of habitat projects tracking data in Oregon	ODFW, on an ongoing basis, will capture restoration activities related to the Statewide Wildlife Conservation Strategy, or will ensure that these activities are captured within the OWEB Restoration Database.	The GIS Analyst met with OWEB staff to discuss making a large portion of the Oregon Watershed Restoration Inventory database available via ODFW's and StreamNet's IMS sites.
6	WDFW development of habitat projects tracking data	WDFW will complete conversion and exchange of Washington habitat restoration project information extracted from IAC's PRISM system and WDFW's LIP initiative. They will scope out additional content from pertinent 2000-2004 PCSRF data and other sources as time permits.	<p>The Olympia Data Compiler reviewed StreamNet's newest habitat restoration DEF proposal and developed an internal WDFW Access version to aid conversion of agency data to the StreamNet DEF.</p> <p>Four habitat restoration funding programs within WDFW were identified and assessed for their current data storage methods. The numbers of projects that qualify for submission were determined for each program. A meeting with three WDFW habitat restoration programs that indicated an interest in the database took place on December 15. The Project Manager provided an overview of the regional context for StreamNet. The Data Compiler gave a PowerPoint presentation introducing StreamNet, benefits of a data exchange and a brief introduction to StreamNet's habitat restoration database structure.</p> <p>Contact was made with the agency director's office as well as the WDFW grants committee to coordinate efforts to introduce the StreamNet DEF as a potential candidate to form a common core database structure.</p> <p>The WDFW StreamNet leader obtained software and advanced user access to the IAC's PRISM system. IAC is currently developing a custom interface for direct access to their database to identify and facilitate project record acquisition.</p> <p>The Location Data Manager scoped all the old files and shared any pertinent information with the StreamNet Data Manager to pass responsibility for this general data topic to the Data Compiler. She also attended one last work planning meeting for this general topic.</p>

Work Element: 159 Submit/Acquire Data

Title: 12 Develop fish barrier data

Description: Develop and maintain data sets for barriers to fish migration. This category is still being organized. Existing data on adult barriers will be maintained and updated as practical and exchanged with the regional database at PSMFC. Other sources of barrier data will be explored. Work on juvenile barriers and culverts will require revisions to the DEF. The primary emphasis is on anadromous species except in non-anadromous areas. This is a low priority data set under current base funding, and will be addressed as time and other priorities allow.

Deliverable: Data on fish barriers are maintained and updated by the state StreamNet sub-projects. Updated data are exchanged with the main StreamNet database at PSMFC. New sources of barrier data are located and new, expanded data are obtained.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
2 MFWP development of fish barrier data	MFWP will maintain barrier location, species affected and other fields on stream barriers in Montana. Information will be collected on all species regardless of life history. Barriers data will be exchanged in the StreamNet DEF.	Work continued on this ongoing task.
3 ODFW development of fish barrier data	ODFW, on an ongoing basis, will update and maintain Oregon's Barrier data based on new and/or previously un-incorporated barrier information, including information from non-ODFW sources. Species-specific upstream and downstream passage information for adults and juveniles will be included in the ODFW Barrier Database, and will be submitted to Regional StreamNet when a DEF is adopted.	The GIS Analyst acquired and evaluated region wide USFS culvert data, and sought feedback from the Regional StreamNet GIS Specialist regarding potential locational and attribute accuracy issues with the data.

Work Element: 159 Submit/Acquire Data

Title: 13 Develop juvenile fish data

Description: Develop and maintain information on smolt production (as determined from smolt traps), juvenile abundance (as determined through snorkel, electrofishing, and other surveys), and smolt density model estimates. Primary emphasis will be on maintaining the existing smolt density model data and development of a DEF for these data. The rest of the work for this data category is still under development and will require additional resources to accomplish. This is a low priority data set under current base funding, and will be addressed as time and other priorities allow.

Deliverable: Functional on-line data for juvenile abundance or outmigration of anadromous fish species are maintained and publicly available on the StreamNet website through the tabular data query system. Means of obtaining and disseminating more of this type of data are explored.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

2 WDFW development of juvenile fish data	WDFW will continue maintaining and updating Washington smolt trap databases on all traps in Region 5 (lower Columbia River). They will complete scoping a pilot data conversion and exchange effort for 2005 Cedar Creek trap out-migrant data and write a report detailing data flow, conversion routines needed, time of year to best compile the data, and a timeline for conversion and exchange of all available past years' data.	The Vancouver data compiler proofed 2005 smolt trap data sheets and data entry, then transferred the Excel files into the current Access database. Queries were performed to analyze the data sets, build tables, double check numbers and send to Regional Biologists to run population estimates. Some 2003 and 2004 tables showed discrepancies from the final reports; we worked with Olympia staff to correct these tables for finalizing budget approval and public website viewing.
------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Work Element: 159 Submit/Acquire Data

Title: 14 Develop fish age data

Description: Develop and maintain information on age/sex composition of returning adults, primarily for anadromous species. Emphasis on this data type will increase once the draft DEF is tested and finalized. This is a low priority under current base funding.

Deliverable: A means of consistently displaying age data on a regional basis is explored and a data exchange format for these data is adopted.

Milestone Title	Milestone	Accomplishments in the First Quarter
2 FWS development of fish age data	FWS will process Fish Return and Age data into the new StreamNet Age table format, once a final format has been settled on, and exchange the data with the regional StreamNet database.	Return and Age data were prepared for transformation to the StreamNet Data Exchange Format.
3 IDFG development of fish age data	IDFG will compile and submit the 2005 field season age data from IDFG.	Compilation of the 2005 field season age composition data proceeded during the first quarter.
4 ODFW development of fish age data (maintenance only)	ODFW will initiate work on age data once the Age DEF is approved.	The Data Analyst pursued an age data opportunity for Northern Pikeminnow this quarter; a commitment was made that the data would be submitted when finalized. She also performed calculations on data already compiled in preparation for the planned Age data submission next quarter.
5 WDFW development of fish age data	WDFW will compile, convert and exchange age data from 2004-2005 natural spawner data and from pre-2004 hatchery returns data.	<p>2004 age data for the natural spawn escapement data set were completed and exchanged, with all the necessary corrections made for the new data format.</p> <p>The data manager delivered 770 new age records associated with hatchery returns. These data were limited to the Lower Columbia Tributaries. Other age data were compiled but will not be delivered until accounting discrepancies with WDFW are resolved.</p> <p>We met with other WDFW staff about standardizing a scale card database used for aging anadromous fish. We discussed the different cards used throughout the state and the different databases where the data are located.</p>

Work Element: 159 Submit/Acquire Data

Title: 15 Develop production factor and run reconstruction data

Description: Develop and maintain information on survival, production factors, spawner / recruit estimates, and run reconstruction. This is a low priority data type under current base funding, but the existing spawner / recruit estimate data will be maintained. Current effort will focus on what aspects of this kind of data are most needed.

Deliverable: A means of obtaining and consistently displaying production factor and run reconstruction data on a regional basis is explored, as time permits.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 ODFW develop production factor and run reconstruction data	ODFW, will on a limited basis, assist Columbia River Management section with identifying and compiling productivity data associated with Columbia Basin populations.	Other priorities prevented work on this exploratory milestone.

Work Element: 159 Submit/Acquire Data

Title: 16 Develop diversion screening data

Description: Explore the availability of data on diversion screening. Capture data on screens as time and other priorities allow. The DEF will need to be finalized before much can be done with this data type. This has been a low priority data set under current base level funding, although NPCC has recently expressed interest in these data.

Deliverable: The availability and location of diversion and screening data are explored, and means of obtaining, and displaying them on a regional basis are explored, with available data posted on the StreamNet website or cooperating agency websites.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
3 ODFW investigate location and availability of water diversions and screen data	ODFW will investigate the amount and location of data related to water diversions and any associated fish screens and determine the availability of those data. This will be done in preparation for developing a program to obtain and regionally standardize these data.	The Project Leader met with Fish Screening and Passage Program staff to identify their database development needs in anticipation of sharing this information through StreamNet.

Title: 17 Develop other data sets

Description: On an opportunistic basis, develop other types of data as available or as requested by FWP participants. This relates primarily to data relevant to StreamNet objectives which would be developed by StreamNet cooperators, but can also include data developed by other agencies or projects. Actual acquisition, standardization, georeferencing and distribution of these data will be dependent on available time and funding. These data may be included in the DEF in the future, or may be obtained and distributed as Independent Data Sets in native format. Development of other data by StreamNet is a low priority under current base funding. Receiving and posting Independent Data Sets from other entities is a high priority.

Deliverable: Other fish related data (other than the standard StreamNet data categories) are obtained and made available through the StreamNet website as they become available on an opportunistic basis. Data sets that do not fit into the StreamNet data exchange formats are posted on the Independent Data Sets page in their native format as submitted.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
3 MFWP development of other data sets	MFWP will provide updated genetic results information on Montana's species of concern and updates to other datasets provided as independent datasets. They will also explore providing other data sets if time allows and as desired by regional staff.	Updates to the genetics database were completed but data were not exchanged yet.
4 ODFW development of other data sets	ODFW, as requested and within budget/time constraints, will work with FWP supported projects in the state, as well as ODFW and other agency staff to facilitate either the incorporation of their data into StreamNet or independently posting their data on the StreamNet web site (opportunistically, and as time allows).	We obtained carcass placement counts for the 2004-2005 season and posted them to the ODFW website. The link was provided to Regional StreamNet to make them aware that the data are available.
5 PSMFC support for development and acquisition of other data sets	The Region, on request, will develop or advise and assist data developers with other data sets (those being compiled by StreamNet cooperators but not currently in the StreamNet DEF). Low priority, and within current resources only.	PSMFC requested and received barriers data from Region 6 of the US Forest Service (Oregon and Washington). These data, which are mainly for culverts on USFS lands, were examined and passed along to the Oregon and Washington StreamNet personnel. These data sets are a useful supplement to currently-held barriers data, in that they are for lands for which StreamNet currently has little data. However, they will take significant effort to convert to StreamNet's georeferencing system. The Regional Fisheries Biologist assisted Washington StreamNet personnel in submittal of a data set for returns of anadromous fishes to the Lewis River basin.

6 PSMFC development of Independent Data Sets	The Region, on an ongoing and opportunistic basis, will work with FWP funded projects and other projects and agencies in the region to identify data sets appropriate for inclusion in the Independent Data Sets archive, encourage submission of those data sets to the IDS archive, and assist them with the submission process.	A water quality data set for the Duck Valley Indian Reservation (Idaho/Nevada border) was acquired and added to the Independent Data Sets archive. A macroinvertebrates database from Oregon DEQ that was obtained several years ago was added to the Independent Data Sets archive. This data set was the result of past efforts by ODEQ and StreamNet to provide region-wide data sharing for macroinvertebrates. Discussions between StreamNet and the Xerces Society resumed on how StreamNet can best help regional sharing of macroinvertebrates data, particularly for non-governmental volunteer groups. We will pursue this at a low level into the future, and aim to create a mechanism for data sharing.
7 PSMFC development of independent data set links archiving	The Region will review the StreamNet Links web pages to identify Internet sites that provide on-line data and add those sites to the Independent Data Sets page.	A link to the US Fish and Wildlife Service's images library was added as an independent data set.

Work Element: 159 Submit/Acquire Data

Title: 18 Library: Collection development

Description: The StreamNet Library, with input from the other project participants, will develop a collection of materials applicable to the mission of StreamNet. We will collect, catalog and organize materials to document data sources, Fish and Wildlife Program activities and reports, and other gray literature for access by regional scientists, agencies, interested parties, and other libraries. The project participants will submit reference documents for all data contained in the StreamNet database to the StreamNet Library.

Deliverable: The collection in the StreamNet Library is maintained and increased by addition of pertinent publications and reports and by reference documents supporting the data added to the StreamNet database.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

1	CRITFC StreamNet Library collection development	<p>CRITFC, on an ongoing basis, will:</p> <ol style="list-style-type: none"> 1. Develop a collection of materials related to the Columbia Basin, including reports from other Fish & Wildlife Program projects, other agency documents as they relate to the Basin, and other published and unpublished materials as requested by clients. 2. Coordinate, receive, and incorporate source document submissions for data compiled by project participants and entered into the StreamNet database. This includes references for data included in the data query system and also data in the Independent Data Sets. 3. Develop and maintain a collection of journals related to fisheries and aquatic sciences as well as other related scientific topics. 4. Digitize collections of historic documents, especially as they relate to the Columbia Basin. 5. Work with ODFW StreamNet Library to integrate collections to restore access to materials. <p>CRITFC, on an ongoing and opportunistic basis, will provide access to documents as references for Independent Data sets.</p>	<ol style="list-style-type: none"> 1. Materials from BPA were added to the collection. Other documents were also received as donations from area researchers. 2. Library staff received source documents from participants and entered records into the library catalog. 3. Journal renewals were received and are being prepared for submission as purchase requests. 4. The work plan for the historical document digitization is being finalized. 5. No work was accomplished on coordinating with the ODFW StreamNet Library. 6. The Librarian continued to work with Johnson Cr. Watershed Council and Vancouver Lake Watershed Partnership. We continued ongoing work with the Portland Audubon Society to ease the transition of library materials to the StreamNet Library.
3	MFWP provide references to data	<p>MFWP, on an ongoing basis, will obtain reference documents for all data developed under WE 159 and submit them to the StreamNet Library for inclusion in the collection and catalog.</p>	<p>31 references were added this quarter.</p>

Work Element 160 Create/Manage/Maintain Database

Work Element: 160 Create/Manage/Maintain Database

Title: 1 System administration

Description: All StreamNet cooperators will manage and maintain the computer systems (hardware and software) necessary for supporting the tabular and GIS data systems at the regional and cooperating agency levels, including system backup. This is a high priority work element that is essential to proper functioning of the project.

Deliverable: The computer systems used to obtain, store, manage, back up, and distribute data (hardware and software) are maintained in functioning condition and updated as needed at PSMFC and the cooperating agencies.

Milestone Title	Milestone	Accomplishments in the First Quarter

1	CRITFC computer system administration	CRITFC, on an ongoing basis, will manage, maintain and enhance the computer systems (hardware and software) necessary for supporting the StreamNet Library, including system administration, backup and recovery, hardware and software upgrades, and security.	Routine systems administration continued. New library software was loaded onto a test server and data records were imported for further testing.
2	FWS computer system administration	FWS, on an ongoing basis, will manage and maintain the computer systems (hardware and software) necessary for supporting the tabular data systems.	Virus, spyware, and adware protections were updated.
3	IDFG computer system administration	IDFG, on an ongoing basis, will manage, maintain and enhance the computer systems (hardware and software) necessary for supporting tabular and GIS data systems, including system administration, backup and recovery, hardware and software upgrades, and security.	Routine system administration continued. A new database server was installed and configured. Work to migrate our existing fisheries database to the new server was begun.
4	MFWP information system administration	MFWP, on an ongoing basis, will manage and maintain the computer systems necessary for supporting the tabular and GIS data management systems and provide needs to MFWP system administrators.	FWP took over system administration duties for StreamNet staff located at the Montana State Library. GIS administration is still shared between FWP Information Management Bureau staff and NRIS (library).
5	ODFW computer system administration	ODFW, on an ongoing basis, will manage, maintain and enhance the computer systems (hardware and software) necessary for supporting tabular and GIS data systems, including system administration, backup and recovery, hardware and software upgrades, and security.	<p>Oregon StreamNet upgraded GIS software on desktop and workstation computers, and started the process to update GIS licenses and security patches. We acquired a vintage plotter (no cost to StreamNet) that will be used to address map printing needs of other ODFW programs, and created a separate geodatabase for storage and more efficient management of wildlife specific data. We also acquired Species Management Unit and Population datasets from the Oregon Plan Monitoring team and built them into the enterprise fish geodatabase.</p> <p>The GIS Analyst converted the IMS site to a more restrictive user login format and then performed troubleshooting on the conversion.</p> <p>We continued converting ODFW's web applications from MySQL to SQL Server and the WebFX framework and troubleshooting various aspects to ensure successful conversion. Focused attention was directed to the Library Bibliography web application.</p>

6 PSMFC computer system administration	<p>The Region, on an ongoing basis, will maintain and update, as necessary, the hardware and software necessary to accomplish StreamNet's mission, including system administration, system backup and recovery, and security. Specific functions include:</p> <ol style="list-style-type: none"> 1. Management and maintenance of the GIS system, including GIS software (ArcGIS, ArcSDE, ArcIMS), extensions, and projects, and all associated hardware, that constitute the regional Geographic Information System; 2. Maintenance and upgrade of the StreamNet web server and software, including programming, system security, etc., with a target of the web server being on line and operational over 99.5% of the time; and, 3. Maintain database servers and SQL Server software and databases; installing updates, patches and service packs as they become available. Manage logins, user permissions and client access tools. Routinely backup all databases and assist with purchasing. 4. Assist with development of XML schema based options for both incoming and outgoing data. Continue exploration of how XML can enhance data exchange. 	<p>Routine maintenance occurred on the StreamNet database servers, including new daily, weekly and monthly backup jobs, and database porting to newer servers. Windows 2000 Server updates were made. The primary database server lost one of it's 4 central processing units due to failure, which was replaced under warranty, and the system bios was updated in order to match the stepping speed of the new CPU.</p> <p>The GIS system was maintained and all server and client software was upgraded to the latest version (9.1 sp1). Apache and ColdFusion updates were applied. We continue to improve web server performance and reduce web errors and problems caused by web robots and attacks.</p> <p>New XML output was added to several query data categories improving the system interoperability with StreamNet partners.</p> <p>The Regional Fisheries Biologist was taught how to administer the ftp server software. As more people learn to administer the various parts of the system, greater reliability of the system should result.</p>
7 WDFW computer system administration	<p>WDFW, on an ongoing basis, will manage, maintain and enhance the computer systems (hardware and software) necessary for supporting Washington StreamNet tabular and GIS data, including system administration, backup and recovery, hardware and software upgrades, and security.</p>	<p>Appropriate computer software updates and security measures were performed by staff to meet agency and user needs.</p> <p>Internally we worked out a better way to store and document hatchery, dam, trap and all related point information in a single geodatabase.</p>

Work Element: 160 Create/Manage/Maintain Database

Title: 2 Application and interface development

Description: All StreamNet cooperators will develop and maintain computer applications and interfaces that facilitate the entry, management and dissemination of tabular and GIS data at the regional and subcontracting agency levels. This will include development of new applications and tools as well as maintenance or modification of existing applications.

Deliverable: The databases, computer applications and interfaces necessary for obtaining, storing, managing and disseminating data are developed and maintained in such a way that they support accomplishment of project goals.

Milestone Title	Milestone	Accomplishments in the First Quarter
1 CRITFC development and/or maintenance of applications and interfaces	<p>CRITFC, on an ongoing basis, will develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of tabular data.</p>	<p>The Project Leader met with tribal biologists to scope out their needs for data management tools. A high priority need was identified and an ad hoc group continued work to describe the need for each tribe.</p>

2	FWS development and/or maintenance of applications and interfaces	FWS will manage and maintain computer applications and interfaces necessary for supporting the tabular data systems on an ongoing basis.	CRiS Age programs were updated to meet new printer limitations.
3	IDFG development and/or maintenance of applications and interfaces	IDFG, on an ongoing basis, will develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of tabular and GIS data.	The .Net interface for the Spawning Ground Survey and the Idaho StreamNet databases were completed.
4	MFWP development and/or maintenance of applications and interfaces	MFWP will develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of tabular and GIS data.	Work continued on this ongoing task. We are exploring the use of the geodatabase model to manage FWP spatial data.
5	ODFW development and/or maintenance of applications and interfaces	ODFW, on an ongoing basis, will develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of tabular and GIS data.	We progressed toward migrating the Web Application Development Framework to utilize SQL Server as its database store rather than MySQL.
8	ODFW development of online data tools	ODFW will develop online data development tools, possibly for such datasets as barriers, distribution, etc.	Oregon StreamNet staff met to discuss the details of an application for facilitating change requests to the Fish Habitat Distribution data.
9	PSMFC development and/or maintenance of applications and interfaces	<p>The Region, on an ongoing basis, will:</p> <p>Maintain the LLID/NHD hydrography conversion tool. We will track the efforts of others, including the USGS, to build crosswalks between the LLID and NHD route systems and seek opportunities to collaborate;</p> <p>Research the creation of an Online Event Mapper that allows users to create event tables based on 1:100,000 scale hydrography over the Internet;</p> <p>Modify the web data query system to add the capability of displaying data conforming to changes in the DEF, particularly age data, since the new Age DEF should be approved and ready for implementation by FY-06; and,</p> <p>Develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of tabular and GIS data. They will assist cooperating agencies with tool development, as requested. Tools may include input interfaces, error checking, geographic locators, etc.</p>	<p>The existing LLID/NHD conversion tool is now available upon request. This tool or a similar application is being considered as part of the migration path to a higher resolution nationally standard routed hydrography.</p> <p>Development of an online Event Mapper was researched but would require an ArcGIS Server software license which is currently cost prohibitive. In the meantime, StreamNet at the regional level is able to share pooled licenses of ArcGIS desktop software to cooperators who lack the required capability.</p> <p>The web query system was updated for several data categories, including Hatchery Returns, to accommodate changes in the DEF.</p>

- | | | |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 WDFW development and/or maintenance of applications and interfaces | WDFW, on an ongoing basis, will develop and/or maintain computerized databases, applications and interfaces that facilitate the entry, compilation, management and dissemination of Washington StreamNet tabular and GIS data. | Work started on the development of a new user interface system with support software for management of the new mixed scale hydrography and related StreamNet data. This system will allow for easier access to the layers via the HUC or the Washington WRIA and will provide for automated data release in coverages or shape files. |
| | | The Data Manager is overseeing the creation of databases, application and interfaces to help store and organize spawner related data. Another WDFW staff person is taking lead on the development of these tools. |

Work Element: 160 Create/Manage/Maintain Database

Title: 3 Data (content) management

Description: The StreamNet project will manage data at the regional and subcontracting agency levels to assure timely and accurate data flow from source to final distribution. Activities include exchange of data to PSMFC, data loading, updating data, quality assurance procedures, metadata development, etc.

Deliverable: Data are maintained and managed at PSMFC and the cooperating projects so that they are available through the StreamNet website and cooperating agency websites.

Milestone Title	Milestone	Accomplishments in the First Quarter
1 CRITFC data content management, QA/QC	CRITFC, on an ongoing basis, will perform comprehensive QA/QC on all datasets maintained by CRITFC.	Library catalog records were updated and corrected as errors were found.
2 FWS data content management, QA/QC	FWS on an ongoing basis, will manage data at the agency level, conduct quality checks, and exchange data to PSMFC as specified in this Statement of Work.	QA/QC was performed on Returns and Age data. These checks are built into processing programs, and are performed upon review of output.
3 IDFG data content management, QA/QC	IDFG, on an ongoing basis, will manage data at the agency level, conduct quality checks, develop and maintain FGDC compliant metadata, and exchange data to PSMFC as specified in this Statement of Work.	A review and restructuring of all Idaho redd count trends, redd count data, hatchery returns and age composition databases was completed. The review of redd count trends and redd count data has been greatly needed. We expanded the number of trends from 30 to 713 by breaking apart trends that had been rolled up into whole streams into their original transect based trends. We also captured additional redd count data that had not previously been reported by including non-index trends. By replacing the old redd count trends with these new data in the StreamNet database, users will have access to much improved data.
4 MFWP data content management, QA/QC	MFWP will manage all data related to deliverables in the SOW at the agency level, develop and maintain FGDC compliant metadata for GIS data, and exchange data to PSMFC according to deadlines specified in this work statement.	Work continued on this ongoing task.

5	ODFW data content management	ODFW, on an ongoing basis, will manage ODFW-NRIMP and StreamNet data, including metadata development/maintenance, QA/QC activities, and work with regional staff as necessary to assure seamless loading of data into the regional database.	Ongoing work continued successfully.
6	ODFW data content management, QA/QC	ODFW will perform comprehensive QA/QC on all remaining Oregon Trends, Age, Harvest, Dams, and Barrier datasets not completed in FY-05.	Existing abundance data records continued to be corrected and/or made consistent across the years of data availability, and QA/QC protocol documents are being improved and refined as error-checking strategies are added or improved and employed.
7	PSMFC support for data content management	The Region, on an ongoing, as needed basis, will assist data contributing agencies in development of data, including formatting, coding, data entry, error checking, and submitting to the regional database.	<p>The GIS Specialist, Fish Biologist and Regional Data Manager met with the WDFW StreamNet technical staff in Olympia to discuss data compiling schedules and issues impacting data entry, formatting and quality control.</p> <p>The Regional Fish Biologist assisted Washington with development of a database template for capturing habitat restoration projects data that meet the StreamNet data exchange format. The template was modified from an initial effort created by Montana that did not quite meet DEF requirements.</p> <p>The Regional Fish Biologist assisted ODFW personnel with interpretation and age data.</p>

8 PSMFC GIS data content management

The Region, on an ongoing basis, will manage GIS data content for the StreamNet project through the following actions:

1. Whenever new tabular data with a spatial component are submitted to the Region (e.g., fish distribution, hatchery facilities, etc.), the GIS Specialist will create regional GIS layers from this information where possible. He will verify correct format, accuracy and logical consistency of spatial data sets and attributes through coordination with state GIS contacts and then load data to the regional database in coordination with the database manager. He will post mappable layers to the online query system, the ArcIMS interactive mapping system, and as downloadable layers for StreamNet GIS users;
2. The GIS Specialist will maintain a library of StreamNet GIS layers for internal use and as downloadable data on the web site with complete documentation (metadata);
3. He will obtain and refine layers such as ESUs, ecoregions, or elevations, and create cross tables for use by the query system;
4. He will assist the database manager with the spatial component of data and its implementation online;
5. He will coordinate efforts by the StreamNet partners to maintain and update, as necessary, the 1:100,000 scale hydrography files for the states and the PNW region;
6. He will coordinate efforts by the StreamNet partners to create a hybrid 1:100,000 / 1:24,000 scale hydrography for the states and the PNW region, and will implement these changes at the Regional office; and,
7. He will integrate the functioning of the GIS system with the StreamNet fisheries and habitat database in support of the query system, and will maintain up-to-date cross tables used via the StreamNet web interface to select information by geographic area.

Data submitted to the region was included in the GIS library and cross referenced to enable spatial filtering via the web query system. Data were added to the ArcIMS applications and the library of downloadable GIS layers. The GIS specialist continued to attend meetings related to the regional coordination of spatial data and services.

9 PSMFC tabular data content management, QA/QC	<p>The Region, on an ongoing basis through the Regional Database Manager will:</p> <ol style="list-style-type: none"> 1. Update and append data to the regional StreamNet database as they are submitted by StreamNet participants, maintain logs of data submissions, and provide feedback to agency compilers to promote data exchanges that are consistent with others throughout the Columbia region; 2. Update StreamNet database schema to accommodate changes in the official data exchange format. Indexes and triggers will be created and maintained for efficient processing, storage and retrieval of data. He will ensure that routine data file and database backups are performed, and that the database software is updated with the manufacturer's service packs. He will maintain database logins, user permissions, and client access tools. He will create views and stored procedures for use by the web based query system and in data loading and validation processes, develop and run QA/QC processes on new and existing data tables to Isolate missing, erroneous or duplicative data, and work with source agencies to correct problems and continue to improve error-checking capabilities; 3. Produce a downloadable version of StreamNet's primary fish enumeration data in Access database format, downloadable ASCII formatted files of primary StreamNet data tables and maintain an online data dictionary; 4. Routinely assist the StreamNet Librarian in exporting the library reference database of StreamNet documents and import StreamNet citations into the regional StreamNet database for use by the web query system to cite references for all StreamNet data records; and, 5. Provide the regional staff and steering committee with guidance and supporting analysis of data issues, shortcomings and recommended improvements. 	<p>The most significant updates to the StreamNet database during this quarter included an entire replacement of Chinook and steelhead redd count data in Idaho with over 6,700 records identifying redd counts by transect instead of more general summarizations.</p> <p>A considerable effort was made to improve the completeness of location geo-referencing tables that are used by the web query system to focus users data searches by state, county, province, subbasin, HUC, etc. A StreamNet Library data exchange was made, and work was done to remove duplicate barriers from the Barrier table.</p>
10 WDFW data content management, QA/QC	<p>WDFW will develop and manage all Washington StreamNet data, including development of FGDC compliant metadata for GIS data, and exchange data with the StreamNet Regional Office at PSMFC using StreamNet standard Data Exchange Format codes and conventions.</p>	<p>Changes to current Washington StreamNet data sets that reflect all 2005.1 Data Exchange Format guidelines were performed.</p> <p>Work was also done to speed the conversion of 2005.1 DEF age data to 2005.2 DEF format as the 2005.1 format did not work for the StreamNet Data Managers.</p> <p>The PSMFC StreamNet Data Manager met with WDFW counterparts in Olympia on December 21 to discuss current data-related issues.</p>

- | | | | |
|----|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 | WDFW location data content management, QA/QC | Develop and manage all Washington locations-related data, including development of FGDC compliant metadata as warranted, and embed such data in all data exchanges with the StreamNet Regional Office at PSMFC using StreamNet standard Data Exchange Format codes and conventions. | The Location Data Manager started compiling adult trap locations and looking directly at WDFW's Adult Ticket database to identify QC issues with the lack of standards in describing sites as "facilities".

The Stream Catalog codes for San Poil basin (WRIA 52) historically have been a problem. More than one code was assigned to some streams and not certain which were the true codes to use. The Location Data Manager created a cross-reference of San Poil Basin Stream Catalog codes and LLIDs to educate everyone about the decisions made in this basin. Columbia Basin cross-coding had not been attempted before because Catalog codes did not come with maps and it was felt it would be impossible to cross-reference to LLIDs. Since the WRIA 52 effort was a success, she also led the effort to start creating a cross-reference for Columbia Basin Stream Catalog codes and LLIDs in the remaining basins. |
|----|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Work Element: 160 Create/Manage/Maintain Database

Title: 4 Data exchange standard development

Description: The project will establish and maintain data exchange standards to ensure consistent content and format of data that originate from multiple data sources. We will maintain adopted and develop proposed data exchange formats for data categories described under Work Element 159. This task will provide coordination and technical assistance regarding interpretation of database structures and codes. The formal process for creating new and revising old DEFs may require significant amounts of time, potentially more than a year, for complex data categories.

Deliverable: The formal Data Exchange Formats that are used to standardize data regionally are maintained and updated as needed. Additions and changes to the DEF are made in accordance with the DEF guidance document. At least one new DEF version is adopted during the year.

Milestone Title	Milestone	Accomplishments in the First Quarter
2	FWS development and maintenance of data exchange standards	FWS, on an ongoing basis, will work cooperatively through the Steering Committee, following the DEF Process document, to revise existing and/or develop new DEFs to assure regional data consistency and allow for inclusion of new data types.
5	ODFW development and maintenance of data exchange standards	ODFW, on an ongoing basis, will work cooperatively through the Steering Committee, following the DEF Process document, to revise existing and/or develop new DEFs to assure regional data consistency and allow for inclusion of new data types.

6	PSMFC development and maintenance of data exchange standards	The Region, on an ongoing, as needed basis, will work cooperatively through the Steering Committee, following the DEF Process document, to revise existing and/or develop new DEFs to assure regional data consistency and allow for inclusion of new data types. The Regional Biologist will serve as the primary coordinator of the DEF process and is responsible for updating and publishing the official DEF document.	<p>PSMFC received a request from ODFW for 24 new codes to add to the StreamNet species table. The list was reviewed: appropriate codes were added; synonyms were identified; questionable taxa were sent back for review. All necessary new codes were identified and added.</p> <p>New codes were added for several portions of the habitat restoration projects data DEF. PSMFC and WDFW worked together to determine how PRISM's "lead entity" maps to the StreamNet concepts for restoration projects. (It's a "watershed council" in StreamNet's language, which was language acquired from OWEB.)</p> <p>The inability to reference more than one document has been a short-coming of the StreamNet data exchange format. A strategy for allowing more than one reference for a record was created this quarter. Implementation of this idea will occur in a future version of the DEF.</p>
7	PSMFC development and maintenance of data exchange standards, Fish Sightings	The Region and Montana will initiate work on a new DEF for fish sightings data. They will review the approach being taken in California and, in coordination with the cooperating projects, adapt it for use in the Columbia Basin.	<p>Work proceeded on a DEF structure for fish sightings. Two occurrences complicated this effort, however.</p> <p>First, one of the ideas for including this data type in StreamNet would involve a major reorganization of most data categories, and would thus be a very large effort.</p> <p>Second, though this item is in the FY-06 work statement, we were not sure if it would be continued into future years. Because of the potentially major effort this could entail and the potential that we may not pursue this, we decided to suspend effort until we were certain of our direction. This effort will be re-evaluated in the second quarter.</p>
8	PSMFC development and maintenance of data exchange standards, EMAP-based data sets.	The Region will investigate the special needs for the capture, storage, and dissemination of data collected following an EMAP (randomized sampling) approach. They will make progress toward delivering these data sets to users in a more useful format.	<p>The project Biologist contacted EPA staff and signed up to attend an EPA training session in the statistics for the EMAP process, but the training was cancelled. Effort will be made to participate in future training opportunities. Understanding the statistical treatment of data under this randomized approach will be necessary before an appropriate DEF can be developed for data collected using this approach.</p>

Work Element 161 Disseminate Raw & Summary Data

Work Element: 161 Disseminate Raw & Summary Data

Title: 1 Develop and maintain Internet sites for data dissemination

Description: StreamNet will continue to maintain and enhance the StreamNet Internet sites. We will provide access to StreamNet data products through the Internet at both the regional and cooperating project levels. The StreamNet home page (www.streamnet.org) will continue to be utilized as the project's primary data delivery vehicle. Priority will be given to incorporating data developed through Work Element 159 and providing access to reference materials secured through Work Element 98. The site will also be used to archive data sets developed by FWP participants for data that do not fit within the StreamNet DEF (Independent Data Sets), including the means to index and search the archive.

Deliverable: Internet sites for the dissemination of data at PSMFC and the cooperating agencies are maintained and functional. New web pages and features are developed as necessary to maximize the availability and utility of data.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
2 IDFG StreamNet Internet site maintenance and development	IDFG, on an ongoing basis, will provide review of the StreamNet website (StreamNet's primary data dissemination tool) through routine use of the site, providing feedback to StreamNet staff at PSMFC on any problems, errors or needed improvements.	System administration procedures were conducted for our internal web site system.
4 ODFW StreamNet Internet site maintenance and development	ODFW, on an ongoing basis, will provide review of the StreamNet website (StreamNet's primary data dissemination tool) through routine use of the site, providing feedback to StreamNet staff at PSMFC on any problems, errors or needed improvements.	We provided functionality-related feedback to Regional StreamNet staff during the quarter.

5 ODFW internal Internet site maintenance and development

ODFW, on an ongoing basis, will manage and maintain Oregon's web-based data integration, communication, and data transfer systems and their links to StreamNet.

Oregon StreamNet developed and launched a pilot general purpose ODFW Internet Map Server (IMS) Web site designed to provide ODFW employees with easy access to a variety of agency GIS data in a map format. As we receive feedback, functionality and content will be enhanced to use the site as a vehicle to update data that is exchanged with StreamNet, such as distribution and barrier data. We also plan to extend the reach of this project to provide the same service to partner agencies and the public.

Staff began migrating websites maintained by NRIMP from the old MySQL Web Application Framework into the new WebFX framework, which is based on MS SQL Server, and upgrading user roles to improve the administration of all our websites. Ongoing troubleshooting is ensuring a successful conversion.

The ODFW Corvallis Research Lab website was successfully converted to the new agency framework. More ODFW Progress and Information reports were scanned and posted to the Corvallis Research Lab website, and citations for the site's index page were drafted and posted during the quarter.

For the period of October through December 2005, the web server provided an average of 37,484 page views per month to an average of 3,727 unique IP addresses.

FTP Download Statistics for October - December 2005:

	Oct.	Nov.	Dec.	Total
Files Served	1,839	2,176	1,659	5,674
Total Gig.	3.40	2.48	2.73	8.61

StreamNet related Oregon website usage (page views):

Website	Oct.	Nov.	Dec.	Total
NRIMP (OR StreamNet)	9,641	9,138	8,591	27,370
CSMEP Web Application	1,316	1,831	105	3,252

6 PSMFC Internet site maintenance and development

The Region, on an ongoing basis, will maintain and improve the StreamNet Internet site (the primary means of disseminating StreamNet data), through the following actions:

1. Correcting errors, adding or fixing links, improving performance, improving looks and usability, etc.;
2. Guide development and enhancement of the StreamNet web query system from the perspective of data users, and review changes to the web query system to ensure they are implemented appropriately and do not create unforeseen problems;
3. Maintain the GIS Data, Map, and PNW Reach File Internet pages;
4. Maintain, update as necessary, and improve the Internet mapping component to the StreamNet web site to allow users to access StreamNet data through interactive map interfaces. Improvements might include modifications to the mapping interface, improving data content (background imagery and vector data), and mapping trend locations selected via the web query system;
5. Research integration of 4th, 5th and 6th field HUC boundary layers into a single region-wide dataset and plan improvements to the web-query system and Internet map application as this improved base data becomes available;
6. Deploy, as needed, new query system components and data categories that are approved by the Steering Committee;
7. Maintain logs of web query history and error events, track and report Internet site usage by month, and investigate web query system errors encountered; and,
8. Maintain and enhance the functionality, look and usability of the StreamNet web-based query system.

All GIS data delivery web pages and interactive map applications were maintained. Work continued to improve the web map applications including the development of new applications for partner projects. Work began on implementing the Age Data category in the tabular data query system. We anticipate this data will be available through the system by the end of Q2.

Additions were made to the "Fishes Found in Fresh Waters of the Pacific Northwest" web page, using information provided by ODFW.

Work Element: 161 Disseminate Raw & Summary Data

Title: 2 Respond to data/information requests

Description: Receive and respond to requests for data and information, source materials, and custom products at the regional and cooperating agency levels. Response to requests will be honored within the limits of available resources, with priority given to information requests having direct relevance to the Fish and Wildlife Program. Other priorities will include implementation of the Endangered Species Act and federal, state, and tribal natural resource management activities.

Deliverable: Requests for information or assistance are responded to in a timely manner (within one business day at PSMFC). If within StreamNet capabilities, requested help or information is provided as rapidly as reasonably possible within existing resources.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

1	FWS respond to and track data/information requests	FWS, on an ongoing basis, will respond to requests for data, maps, technical assistance, source materials, or custom data products at the agency level, within the capabilities provided by base funding. Requests will be logged and reported.	Age and Return data were shared with cooperating agencies as part of routine procedures.
2	IDFG respond to and track data/information requests	IDFG, on an ongoing basis, will respond to requests for data, maps, technical assistance, source materials, or custom data products at the agency level, within the capabilities provided by base funding. Requests will be logged and reported.	Fifty-eight requests for data and maps were filled during the quarter (Tables 1, 2 and 3)
3	MFWP respond to and track data/information requests	MFWP, on an ongoing basis, will respond to requests for data, maps, technical assistance, source materials, or custom data products at the agency level, within the capabilities provided by base funding. Requests will be logged and reported.	There were 5 map and data requests received and satisfied during the quarter (Tables 1, 2 and 3).
4	ODFW respond to and track data/information requests	ODFW, on an ongoing basis, will respond to requests for data, maps, technical assistance, source materials, or custom data products at the agency level, within the capabilities provided by base funding. Requests will be logged and reported.	In response to a request from ODFW's Information and Education Section (I&E), Oregon StreamNet's GIS Analyst created 10 featured waterbody graphic images for a series of warm water angling brochures that I&E is developing. In support of this effort, he acquired a coastal and estuarine boat ramp dataset and supplemented it in the areas of the featured water bodies. There may be some follow-up work required to complete these graphics. The goal is to have the warm water brochures ready for public distribution by spring of 2006. Staff responded to 29 information requests this quarter (Tables 1, 2 and 3).
5	PSMFC respond to and track data/information requests	The Region, on an ongoing basis, will respond within one business day to requests for data, information or help, and will log and report responses to all requests received.	PSMFC responded to 15 user requests during the quarter (Tables 1, 2 and 3).
6	WDFW respond to and track data/information requests	WDFW, on an ongoing basis, will respond to requests for data, maps, technical assistance, source materials, or custom data products at the agency level, within the capabilities provided by base funding. Requests will be logged and reported.	WDFW StreamNet staff responded to 22 major data requests directly during the first quarter (Tables 1, 2 and 3). In addition, fish and hydrography GIS layers built and maintained by StreamNet staff were used by WDFW's Priority Habitats and Species group to respond to 303 data requests, involving 922 maps and 42 digital datasets.

Work Element: 161 Disseminate Raw & Summary Data

Title: 3 Provide data and maps to support Fish and Wildlife Program activities

Description: Provide data and maps and related services to the Fish and Wildlife Program, as requested. Services may include custom development of data, provision of data from the StreamNet database to support FWP activities (such as planning, monitoring and evaluation, etc.), and general advice and technical assistance with database management, data delivery, and GIS. Work under this task will have to be based on time available, particularly for larger requests.

Deliverable: Requested data and maps are provided to subbasin planners, recovery planners, and other projects funded through the FWP.

Milestone Title	Milestone	Accomplishments in the First Quarter
-----------------	-----------	--------------------------------------

1	IDFG support F&W Program Activities with data and maps	IDFG, on an ongoing, opportunistic basis, will support Fish and Wildlife Program activities, such as R, M & E, subbasin assessment, etc., by providing data and maps of existing StreamNet data and technical information, management advice or assistance as requested, to the extent possible within available time and budget under base level funding.	Idaho StreamNet helped the Idaho Supplementation Studies project by merging their juvenile trap data into a single database and made web-based reports of the data.
3	ODFW support F&W Program Activities with data and maps	ODFW, on an ongoing, opportunistic basis, will support Fish and Wildlife Program activities, such as R, M & E, subbasin assessment, etc., by providing data and maps of existing StreamNet data and technical information, management advice or assistance as requested, to the extent possible within available time and budget under base level funding.	Oregon StreamNet staff entered 65 Grande Ronde spring Chinook data records into the CSMEP database, corrected minor mistakes in existing records, and discussed needed improvements to the existing application with ODFW CSMEP biologists.
4	PSMFC support F&W Program Activities with data and maps	The Region, on an ongoing, opportunistic basis, will support Fish and Wildlife Program activities, such as R, M & E, subbasin assessment, etc., by providing data and maps of existing StreamNet data and technical information, management advice or assistance as requested, to the extent possible within available time and budget under base level funding.	No requests for data or maps from FWP projects were received during the quarter.
5	WDFW support F&W Program Activities with data and maps	WDFW, on an ongoing, opportunistic basis, will support Fish and Wildlife Program activities, such as R, M & E, subbasin assessment, etc., by providing data and maps of existing StreamNet data and technical information, management advice or assistance as requested, to the extent possible within available time and budget under base level funding.	The Vancouver Data Compiler loaded additional Methow/Okanogan fish dataset inventory information into the CSMEP web application. She also loaded nearly 250 records of detailed habitat dataset information into the Excel spreadsheet only, because habitat data categories are not fully supported by the current version of the CSMEP Web application. The Project Manager requested that ODFW update the Web application to add the capability to handle dataset inventories for habitat datasets. The CSMEP Project Managers were asked to determine a priority for this work and share it with ODFW.

Work Element: 161 Disseminate Raw & Summary Data

Title: 4 Maintain and post Protected Areas data

Description: StreamNet will a) maintain and provide access to the Council's Protected Areas dataset, b) archive the official version as a historic record, c) in consultation with the Council, respond to requests for information concerning Protected Areas, and d) modernize georeferencing and make these data available through online mapping. If the Council so directs, work with subbasin planners to record any desired changes to the protected status of individual streams.

Deliverable: The NPCC Protected Areas data are maintained and made available through the StreamNet online data query system and the online interactive map application.

Milestone Title	Milestone	Accomplishments in the First Quarter
-----------------	-----------	--------------------------------------

1 PSMFC maintain and post Protected Areas data

The Region, on an ongoing basis, will maintain the Protected Areas database and provide access to the Protected Areas data through the online query system and the interactive map application. As time allows, work to resolve the remaining unresolved location issues that resulted from conversion of the data from the 1:250,000 scale to the 1:100,000 regional hydrography.

The Protected Areas interactive map application was maintained. Work to resolve location referencing issues has been put off until a stable regional 1:24,000 scale routed hydrography is available.

The original Protected Areas data set uses non-standard reach codes to indicate locations. These reach codes exist only on paper copies of the EPA River Reach Files that were "enhanced" by the Northwest Environmental Database (NED, a StreamNet precursor project) in the late 1980s. Many of the data in the Protected Areas data set (referred to as unresolved above) can not be deciphered without these reports. A new scanner and software at PSMFC permits easily scanning large documents, so because these documents existed only in paper form, they were copied to .PDF format this quarter. These electronic files can now be backed up, which should eliminate the possibility that they could be lost. The documents are currently available at <ftp://ftp.streamnet.org/pub/Banach>, but will be made available via the StreamNet Library's web site in the future.

Work Element: 161 Disseminate Raw & Summary Data

Title: 5 Library: Provide access to the library collection

Description: The StreamNet Library will provide user access to the materials described in the collection development work element by providing facilities for storage of paper and electronic copies of documents, an online catalog of all documents in the collection, and staff to answer location questions and respond to requests. They will provide library services to the StreamNet user community, the Council's Fish and Wildlife Program, and the general public. They will network with other agency and regional library service providers to provide better access to other collections that will enhance the StreamNet Library and to avoid unnecessary duplication of effort and materials.

Deliverable: The StreamNet Library is opened to patrons on all business days, and patrons have full access to the collection in person and through phone or Internet requests and to services such as Interlibrary Loan, document searches, etc.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 CRITFC provide access to the StreamNet Library collection	CRITFC, on an ongoing basis, will: 1. Provide and maintain appropriate facilities for the storage and public use of the StreamNet Library Collections. 2. Catalog and organize materials for ease of use by patrons. 3. Update web catalog and archive data by providing copies of the database to the Regional Data Manager on at least a monthly basis. 4. Maintain a plan to place electronic documents in the catalog and on the library website. 5. Provide access to reference documents supporting data in the StreamNet data query system and Independent Data Sets.	1. For the past year, staff has been monitoring the environmental conditions in the library. The Librarian has worked with CRITFC operations staff and Ashforth Pacific (property management) to adjust the temperature and humidity for preservation of library materials. 2. Over 700 catalog records were created or upgraded. 3. The web catalog was updated on a regular basis. Backup copies were provided to the Regional Data Manager on a regular basis. 4. The library staff continue to work with the digitization plans for library documents.

2	CRITFC provide library services to patrons to support dissemination of information	CRITFC, on an ongoing basis, will: <ol style="list-style-type: none"> 1. Provide information and reference services to patrons. 2. Evaluate changes in technology and new feature requests for improved services to library patrons. 3. Provide interlibrary lending and borrowing services for access to unique materials in the library collections and materials not yet owned by the library. 4. Provide consultations for groups and other agencies on library organization and services. 5. Coordinate with other StreamNet libraries, library clients, and other libraries (through professional memberships) to improve service to clients and limit duplication of effort. 	<ol style="list-style-type: none"> 1. We provided information and documents for over 130 requests. 2. No work was accomplished. 3. Nearly 100 requests were received from other libraries for StreamNet library materials. 4. The Librarian continues to work with the Johnson Creek Watershed Council on organizing their research room. The Librarian continues to provide information and research services to the Vancouver Lake Watershed Partnership. 5. Membership in professional organizations has been maintained by the Librarian. The Asst Librarian has also added memberships in groups that increase the visibility of the StreamNet Library and project as a whole.
---	------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Work Element 118 Coordination

Work Element: 118 Coordination

Title: 1 Support Fish and Wildlife Program development activities

Description: Participate in planning, development and/or coordination meetings with regional entities to provide advice in the area of data management, as requested, to support development of Fish and Wildlife Program projects and programs. Provide input on ways StreamNet can effectively contribute to the programs and general advice about data management. Participate in advisory groups, task forces, and other groups whose purpose is to enhance the effectiveness of the Fish and Wildlife Program relative to its data development activities.

Deliverable: StreamNet staff have participated in and supported a number of projects funded through the FWP, including PNAMP, NED and CSMEP.

Milestone Title	Milestone	Accomplishments in the First Quarter
3	MFWP provide support to F&W Program development activities	MFWP, on an as needed or requested basis as base level resources will allow, will work with regional entities to contribute data management expertise toward development of activities within the scope of the Fish and Wildlife Program and serve as a data management resource to the FWP.
4	ODFW provide support to F&W Program development activities	<p>ODFW, on an as needed or requested basis as base level resources will allow, will work with regional entities to contribute data management expertise toward development of activities within the scope of the Fish and Wildlife Program and serve as a data management resource to the FWP.</p> <p>We participated in a conference call with NPCC and StreamNet staff to discuss High Level Indicators and other regional data management issues.</p> <p>The Project Leader participated in several scheduled NED, PNAMP, and CSMEP meetings, contributing to shared discussions about data management-related activities, and future direction / funding options.</p> <p>Ongoing maintenance of the CSMEP web application continued. Currently there are 1,515 records in the CSMEP web application; 65 added this quarter.</p>

- | | | | |
|---|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | PSMFC provide support to F&W Program development activities | <p>The Region, on an opportunistic basis and within budgeted resources, will work with regional entities to contribute data management expertise toward development of projects and activities within the scope of the Fish and Wildlife Program and serve as a data management resource to the FWP. Specific activities may include:</p> <ol style="list-style-type: none"> 1. Continued participation on the Program Team for the Council's project to develop a Northwest Environmental Data-network (NED) to convey recommendations based on experience in the development of a regional approach to data dissemination; 2. Continued participation in the Pacific Northwest Aquatic Monitoring Partnership (PNAMP) for watershed and fishery data coordination, and other R, M & E groups, including the Action Agencies, Federal Caucus and CBFWA, to provide support and data management expertise; 3. Continued participate with CBFWA in support of data management efforts, including work with the Collaborative Systemwide Monitoring and Evaluation Project (CSMEP); and, 4. Provide support (expertise and guidance) to other FWP related programs and projects as requested and as possible under existing resources. | <p>The StreamNet Program Manager and Regional Fisheries Biologist continued their participation in the PNAMP effort. A number of meetings were attended by each. Effort was expended toward PNAMP's desired questionnaire of current monitoring activities. Also, feedback to NPCC staff was provided for the "high-level indicators" being developed.</p> <p>The Program Manager developed a spreadsheet describing the various regional organizations and projects working on monitoring and data management to help alleviate confusion over how these groups relate to each other. The spreadsheet was disseminated through PNAMP and NED, and is available at http://www.streamnet.org/about-sn/project_management.html</p> |
| 6 | WDFW provide support to F&W Program development activities | <p>WDFW, on an as needed or requested basis as base level resources will allow, will work with regional entities to contribute data management expertise toward development of activities within the scope of the Fish and Wildlife Program and serve as a data management resource to the FWP.</p> | <p>The Project Manager demonstrated use of the StreamNet Independent Datasets facility to JSAP Project steering committee members at the annual meeting in December. WDFW staff have submitted Independent Datasets with WDFW JSAP data for all years from 1999 through 2004. WDFW offered to assist other JSAP participants in generating Independent Dataset submissions of their own, while the complexities of their own Universal Database (UDB) and its Web-accessible status remain under study.</p> |

Work Element: 118 Coordination

Title: 2 Support subbasin planning efforts

Description: At the regional and cooperating agency levels, work with subbasin planners to provide needed information from the StreamNet database and to capture data developed as part of the subbasin planning process. We will work with the TOAST group to capture subbasin planning data from Oregon, and in FY-06 will work with others in an attempt to capture similar data in the other Columbia Basin states.

Deliverable: Data used in subbasin planning in Oregon are maintained and available through the StreamNet website, and progress is made toward identifying subbasin planning data from Washington, Idaho and Montana and decisions are made through NPCC on long term acquisition and storage.

Milestone Title	Milestone	Accomplishments in the First Quarter

1 CRITFC support subbasin planning efforts	CRITFC, as requested and within existing resources, will provide technical expertise and other support services (such as capture and archiving of planning data) to subbasin planners and will continue to encourage the use of sub basin plans in other planning efforts at the regional, state and local level.	Plans progressed toward developing a project to capture EDT and QHA data developed during subbasin planning. In addition, we responded to three requests for subbasin planning data or answering questions about subbasin planning data.
4 PSMFC support subbasin planning efforts	The Region, on an ongoing basis and as possible within budgeted resources, now that the initial subbasin planning process has concluded, will work with subbasin planning groups to provide any requested follow up information from the StreamNet database, work with regional entities and subbasin planning groups as requested to provide data management expertise and services related to capturing and archiving data developed during the subbasin planning process and making them readily available. This effort will have to be scaled to fit within existing resources and available time.	The Project Leader attended several NED workgroup meetings to discuss capturing the EDT and QHA data that were developed for the subbasin plans. CRITFC and NHI will be contracted to obtain and organize these data, which will then be archived and made publicly available through the StreamNet searchable archive.

Work Element: 118 Coordination

Title: 3 Coordinate with related activities outside of the FWP

Description: Maintain communications between StreamNet and other applicable regional and state-level fish and wildlife activities and agencies beyond the Council's Fish and Wildlife Program to identify means for collaborative data collection, storage, and dissemination. On request or as possible, collaborative data activities will include tribal fishery programs within the Columbia Basin, federal land managers' fishery programs, state fish and wildlife agencies, and, with respect to water use and stream development, state water resource management and environmental quality agencies. Collaboration with coast-wide and private data collection/compilation efforts will be pursued when this supports overall project goals.

Deliverable: Coordination with fish and wildlife programs outside of the FWP is conducted as possible or needed

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1 CRITFC coordination with related activities outside of the FWP	CRITFC, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	We formed an ad hoc work group with CRITFC tribes to address critical data management needs in the FY-07 solicitation process.

2	IDFG coordination with related activities outside of the FWP	IDFG, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	Idaho StreamNet worked with IDFG staff to provide guidance and assistance for database development activities.
3	MFWP coordination with related activities outside of the FWP	MFWP, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	A draft action plan was created for managing the data and monitoring the Comprehensive Fish and Wildlife Conservation Plan (non-StreamNet)
4	MFWP assist Fisheries Division in preparation of a Statewide Fisheries Management Plan	MFWP will provide support, technical expertise and guidance, and products for the development of the Fisheries Division Statewide Fisheries Management Plan.	Several data matrices were generated for review and 96 reports were created to assist in gathering information from biologists on the Fisheries Management Plan.
5	MFWP assist the Fisheries Division in standardized field survey techniques and forms	MFWP will provide guidance, support and review to the activities of the Fisheries Division in their effort to standardize process and procedure from the field to the data delivery.	Some conversations on genetics data standardization occurred (*with which agencies/entities? This is in the coordination WE*) in the first quarter. Additional meetings were held to better coordinate data management needs. Significant progress was made in moving Library duties to Fisheries Division staff, exposing Public Fishing Log data and bull trout critical habitat layer.
6	ODFW coordination with related activities outside of the FWP	ODFW, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	Oregon StreamNet staff coordinated with State of the Salmon Inventory representatives, the Oregon Geographic Information Council Policy Advisory Committee, and Oregon state GIS staff to further our common aims for managing and sharing fish and wildlife information.
7	ODFW coordination with internal ODFW staff to improve internal data compiling	ODFW, on an ongoing basis, will coordinate and work with internal ODFW staff to improve the agency data collection efforts to allow more efficient compiling into internal intermediate NRIMP-Oregon StreamNet databases and/or StreamNet databases at the regional scale.	Oregon StreamNet continued its involvement on the GIS Coordination Group in ODFW, participating in several Group and Subgroup meetings. The Project Leader presented the need for agency GIS collaboration and the goals of the Group to ODFW's Executive Leadership Team on Nov. 2nd. Our GIS Analyst developed a draft Charter for the Group to serve as a starting point for a discussion on how the group should be organized and what decision-making process the group will follow. Oregon StreamNet/NRIMP staff are actively participating on the Charter Workgroup to finalize the document. The Project Leader met with Fish Screening and Passage Program staff to identify their database development needs in anticipation of sharing this information through StreamNet.

8	PSMFC coordinate with related activities outside of the FWP	The Region, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	NOAA Fisheries researchers used StreamNet data in a habitat restoration projects database they are using. PSMFC personnel responded to a request from NOAA-F to evaluate the accuracy with which NOAA-F converted StreamNet data into their data structure. The Program Manager and PSMFC Fish Biologist attended a meeting of the CBFWA anadromous fish managers. We discussed how StreamNet could assist in CBFWA's planned "State of the Resource" report for which data will be needed. The Regional Fisheries Biologist continued work at a low level with the mussels work group. Discussions for how StreamNet could help this group disseminate data continued.
9	WDFW coordination with related activities outside of the FWP	WDFW, on an opportunistic basis and within budgeted resources, will coordinate with other state, federal, or tribal agencies and various regional interagency planning and management work groups beyond the FWP to enhance the collection and management of data related to management of fish and wildlife resources.	The Project Manager encouraged discussion among Washington resource management agencies about forwarding a FY 2007-2009 proposal to BPA for funding the integration of existing sets of Washington 1:24,000 scale stream linework into a single standardized layer. This layer could then be converted and loaded into the Regional Clearinghouse. There is much currently unknown about how the regional hydrography process will play out; a meeting of Washington interests was scheduled for January 5, 2006 to discuss whether submitting a proposal to BPA is the right approach to take at this time.

Work Element 99 Outreach and Education

Work Element: 99 Outreach and Education

Title: 1 Professional and public involvement

Description: As needed, produce public information materials and participate in various meetings and forums (public or professional) to explain the project's capabilities and purpose and to generate support and additional data sources. Activities may include brochures, issue papers, demonstrations, posters and talks to public, policy or professional groups and organizations.

Deliverable: Materials describing the project are made available, and professional groups are informed about the project and its services.

Milestone Title	Milestone	Accomplishments in the First Quarter
1 CRITFC support for professional and public involvement	CRITFC, on an ongoing basis and as requested, will prepare and deliver presentations to public, scientific and professional meetings to demonstrate project capabilities, services and accomplishments and to solicit additional data and involvement or coordination with the StreamNet project.	Library promotional brochures were sent to regional conferences on related topics (Columbia River Conference & Climate and Fisheries Conference). These materials were distributed to conference attendees

- | | | | |
|---|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | ODFW support for professional and public involvement | ODFW, as needed or requested within budget and time constraints, will prepare and deliver presentations to public, scientific and professional meetings to demonstrate project capabilities, services and accomplishments and to solicit additional data and involvement or coordination with the project. | The GIS Analyst prepared and delivered a presentation to ODFW Wildlife Division managers regarding the current and potential functionality of the ODFW IMS site. |
| 5 | PSMFC support for professional and public involvement | The Region, on an opportunistic basis, will participate in and prepare and deliver presentations to scientific and professional meetings to demonstrate project capabilities and accomplishments, advertise StreamNet services, and to solicit additional data and coordination. Such professional groups may include various units of the American Fisheries Society, the Organization of Fish and Wildlife Information Managers, and other local, regional or national groups. | The fifth StreamNet Newsletter was sent out on November 4, 2005. The newsletter went out to 1,039 email addresses. As usual due to changes in email addresses or changes in jobs, a number of emails bounced back, resulting in 965 newsletters reaching their target. As of the end of the first quarter (12/31/05) there were 971 people signed up to receive future StreamNet Newsletters. |

Work Element 119 Manage and Administer Projects

Work Element: 119 Manage and Administer Projects

Title: 1 Manage project activities

Description: Administer all aspects of the StreamNet project at the regional and cooperating agency levels, including oversight of budget, personnel (including training and staff development), work statement / budget preparation and implementation, coordination among participating agencies, and project guidance through active participation in steering committee work.

Deliverable: Project staff and budgets are effectively managed, work detailed in the SOW is accomplished, and required SOW/budget documents are prepared and submitted on schedule.

Milestone Title	Milestone	Accomplishments in the First Quarter	
1	Project oversight and guidance: Project management and Steering Committee	IDFG will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	The Idaho StreamNet coordinator participated in the Oct 31 - Nov 1 Steering Committee meeting.
1	Project oversight and guidance: Project management and Steering Committee	ODFW will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	Oregon StreamNet participated in the Oct. 31 - Nov. 1 StreamNet Steering Committee meeting in Sellwood, summarizing progress on assignments and offering direction for regional GIS and hydrography data policy.

1 Project oversight and guidance: Project management and Steering Committee	WDFW will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	The Project Manager (with the GIS Manager) attended the October 31-November 1 Steering Committee meeting. He provided a written summary Round Table report, provided WDFW data priorities for the FY 2007-2009 proposal discussions, provided review and comment on the draft meeting minutes, and followed up on all meeting assignments. The Project Manager hosted a meeting in Olympia on December 21 for six WDFW managers and the PSMFC StreamNet Project Manager. Current StreamNet work and strategic targeting of future efforts were discussed. For some it was their introduction to the StreamNet Project at WDFW; they found the discussion lively and relevant to current WDFW needs.
1 Project oversight and guidance: Project management and Steering Committee	FWS will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	The Project Leader participated in extensive discussions regarding proposals on the future activities of StreamNet vis a vie BPA/CBFWA project proposals, and steering committee activities.
1 Project oversight and guidance: Project management and Steering Committee	PSMFC will perform project oversight and guidance at PSMFC and for the project as a whole, and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	PSMFC staff participated in the quarterly Steering Committee meeting.
1 Project oversight and guidance: Project management and Steering Committee	MFWP will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	The Montana StreamNet Program Manager attended the Steering Committee meeting in October and participated on several conference calls concerning the 07-09 Solicitation.
1 Project oversight and guidance: Project management and Steering Committee	CRITFC will perform project oversight and guidance at the cooperator level and will participate cooperatively in the StreamNet Steering Committee to guide the direction of the project, coordinate among agencies and resolve policy and technical issues for the project.	The Project leader and Librarian attended the Steering Committee meeting in October. We worked with the Steering Committee to develop the FY-07 project proposal.
2 Project oversight and guidance: Supervision	ODFW will supervise project staff and provide guidance and staff development.	Routine supervision continued throughout the quarter.
2 Project oversight and guidance: Supervision	MFWP will supervise project staff and provide guidance and staff development.	Staff meetings were held, performance appraisals were scheduled and more infrastructure changes occurred with the reorganization of the information services within MFWP.
2 Project oversight and guidance: Supervision	The Region will supervise project staff at PSMFC and provide guidance and staff development.	Routine supervision continued throughout the quarter.

2	Project oversight and guidance: Supervision	WDFW will supervise project staff and provide guidance and staff development.	The Project Manager and Data Manager performed all necessary supervisory tasks.
2	Project oversight and guidance: Supervision	CRITFC will supervise project staff and provide guidance and staff development.	Normal budgetary and operational oversight and management were accomplished.
2	Project oversight and guidance: Supervision	IDFG will supervise project staff and provide guidance and staff development.	Supervision of Idaho StreamNet staff was conducted.
3	Project oversight and guidance: Budget control	The Region will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	Expenditures from FY-05 were monitored as the end of year process occurred. Ongoing expenditures were tracked.
3	Project oversight and guidance: Budget control	WDFW will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	All budget management was handled in a timely fashion by the Project Manager.
3	Project oversight and guidance: Budget control	ODFW will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	Oregon StreamNet monitored expenditures and managed their part of the project within budget.
3	Project oversight and guidance: Budget control	CRITFC will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	Expenditures were managed according to the approved budget.
3	Project oversight and guidance: Budget control	MFWP will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	Budgets were tracked and bills paid during the quarter.
3	Project oversight and guidance: Budget control	IDFG will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	The Idaho StreamNet budget was monitored regularly and expenditures were managed.
3	Project oversight and guidance: Budget control	FWS will manage expenditures to accomplish the jobs in the Statement of Work within the approved budget.	The project leader performed the appropriate amount of time on the Streamnet project.
6	StreamNet cooperators provide input for the FY-07 draft SOW/budget package	MFWP will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period.	Considerable effort was expended to develop projects for the 07-09 Solicitation during the quarter. A tele-conference meeting was held between Fisheries Division staff in the headquarters and Region 1 and the StreamNet project manager to discuss the 07-09 Solicitation and how Montana StreamNet staff can better serve other projects as well as the division.
6	StreamNet cooperators provide input for the FY-07 draft SOW/budget package	IDFG will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period.	The actual FY-07 SOW has not been started, but the FY07-09 StreamNet proposal and budget was prepared and submitted.
6	StreamNet cooperators provide input for the FY-07 draft SOW/budget package	CRITFC will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period.	We cooperated with other Steering Committee members to develop the FY-07 project proposal.

6	StreamNet cooperators provide input for the FY-07 draft SOW/budget package	FWS will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period.	We participated in development of proposals for future project work.
6	StreamNet cooperators provide input for the FY-07 draft SOW/budget package	ODFW will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period.	<p>Oregon StreamNet staff spent a significant amount of time developing the FY-07 proposal and budget for Oregon. This included:</p> <p>Listening to the Provincial Review Workshop conference call Nov. 4th to gain an understanding of the solicitation process;</p> <p>Participating in ODFW's BPA/Fish and Wildlife Program Project Prioritization meeting in Clackamas on Nov. 29th, during which attendees reviewed and discussed a list of all ongoing projects and their associated cost, and compiled a list of potential new projects that will be proposed;</p> <p>Participating in meetings on Friday, Dec. 2nd and 9th with StreamNet Steering Committee members and Northwest Power and Conservation Council staff to discuss the 2007-09 StreamNet funding proposal strategy;</p> <p>Meeting with ODFW Fish Division managers on Dec. 13th to discuss the 2007-09 StreamNet funding proposal strategy and ODFW's level of support for the project. During the meeting, we identified ODFW's priorities for StreamNet funding, including significant modifications to the CSMEP support section of the draft StreamNet funding proposal;</p> <p>Participating in numerous meetings (in-person and conference calls) with Steering Committee members to discuss StreamNet's various proposals, and the corresponding draft StreamNet Vision document;</p> <p>Coordinating with ODFW Wildlife Diversity staff on the possibility of crafting and submitting a wildlife data management proposal for consideration, including the possibility of including a proposal to develop a Registry of Conservation Actions as one of the StreamNet stand-alone proposals;</p> <p>Developing budgets for the base project in Oregon and the Oregon portion of the StreamNet stand-alone proposals.</p>

- | | | | |
|---|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 | StreamNet cooperators provide input for the FY-07 draft SOW/budget package | WDFW will provide input to the FY-07 Statement of Work and budget to PSMFC 105 days prior to the end of the FY-06 contract period. | <p>The Project Manager provided comment and feedback on the developing StreamNet Vision Statement and Strategic Plan throughout the quarter.</p> <p>The Project Manager drafted a required WDFW internal "proposal" describing agency participation and related costs incurred in the StreamNet Project during the FY2007-2009 time period.</p> <p>The Project Manager participated in multiple meetings and conference calls to help establish the StreamNet approach to a FY 2007-2009 BPA project proposal. He provided the WDFW budget detail by work element on December 29.</p> <p>The Project Manager participated in a December 2 teleconference with StreamNet members and Council staff to discuss StreamNet's needs for linkage to other initiatives in the Basin, to obtain guidance for the 07-09 proposal, and to understand the emerging role of High Level Indicators (HLIs) in Basin decision support. He joined StreamNet members in a follow-up call (12/9) to discuss StreamNet in the PNAMP/CSMEP context and to further explore potential use of draft HLIs in preparation of our budget proposal.</p> |
| 7 | PSMFC develop FY-07 draft SOW/budget package | PSMFC, with input from all project cooperators, will prepare and submit a Statement of Work and budget for FY-07 to BPA 90 days prior to the end of the FY-06 contract period. | <p>Work on the FY-07 budget and work plan began early this year because of the 2007-2009 Solicitation process. Various discussions with the Steering Committee were held by teleconference and at the quarterly Steering Committee meeting to initiate work on the proposal.</p> |

Work Element 141 Produce Status Report

Work Element: 141 Produce Status Report

Title: 1 Quarterly reports

Description: Produce quarterly performance reports on project activities and submit them to BPA within 15 days of the end of each quarter. Once PISCES is fully functional, submit quarterly status reports through PISCES.

Deliverable: Quarterly and status reports are submitted on schedule

Milestone Title	Milestone	Accomplishments in the First Quarter
1 July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	WDFW will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	<p>The Project Manager completed and submitted the WDFW FY2005 4th quarter report on October 11.</p> <p>The Project Manager established and tested a PISCES account in order to assist the PSMFC Project Manager in posting WDFW quarterly status updates.</p>

1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	IDFG will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	The FY 2005 fourth quarter progress report was submitted.
1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	CRITFC will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	The fourth quarter report was submitted.
1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	ODFW will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	Oregon's StreamNet 4th Quarter Report for FY-2005 was completed and delivered to Regional StreamNet on October 12th. Oregon StreamNet staff also reviewed and commented on the ODFW corporate third-quarter report, and submitted our comments.
1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	FWS will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	The project leader completed and submitted an activity report for Q4 of FY 2005.
1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	MFWP will report accomplishment of their portion of the work outlined in the FY-05 Statement of Work, fourth quarter, to PSMFC.	The FY-05 Fourth Quarter report was submitted on time.
1	July - Sept. 2005 (FY-05) Quarterly Report submitted to BPA	PSMFC will report accomplishment of the work outlined in the FY-05 Statement of Work, fourth quarter, through a quarterly progress report submitted to BPA through the Pisces system, plus a detailed quarterly report.	A detailed FY05 fourth quarter report was prepared and submitted to BPA.

Work Element 132 Produce Annual Report

Work Element: 132 Produce Annual Report

Title: 1 Annual report

Description: Produce an annual report for FY-05 project activities within 30 days of the end of the fiscal year.

Deliverable: The annual report is submitted on time

	<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
1	StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC	CRITFC will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC.	Annual report input was developed and input into Pisces.
1	StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC	WDFW will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC.	The Project Manager provided PSMFC with a summary of WDFW StreamNet work and status lights for inclusion in the FY 2005 Pisces Summary Report.
1	StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC	ODFW will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC.	Annual report input was developed and input into Pisces. Oregon StreamNet staff also reviewed and commented on the corporate Pisces performance report, and submitted our comments.
1	StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC	MFWP will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC.	Annual report input was developed and input into Pisces.
1	StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC	FWS will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC.	Annual report input was developed and input into Pisces.

- | | | | |
|---|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | StreamNet cooperators submit input to the FY-05 Annual Report to PSMFC | IDFG will submit their input to the draft FY-05 annual progress report for the sub project to PSMFC. | Annual report input was developed and input into Pisces. |
| 2 | StreamNet 2005 annual report submitted to BPA | The Region will submit the FY-05 annual progress report to BPA. The format will be abbreviated due to the high level of detail conveyed in the quarterly reports, with the final report also published as a brochure. | The Pisces Summary Report for FY-05 was prepared with input from all project partners and submitted to BPA. Submission of the report was delayed slightly due to problems in the Pisces application itself. |

Work Element 999 Work Accomplished Outside the SOW

Work Element: 999 Work Accomplished Outside the SOW

Title: 1 Work outside the SOW

Description: Summarize the activities that took place outside the formal SOW milestones and/or that were accomplished on funding other than the StreamNet contract.

Deliverable: Report of activities outside the SOW that were related to StreamNet objectives, either accomplished as part of the StreamNet project or on other funding.

<u>Milestone Title</u>	<u>Milestone</u>	<u>Accomplishments in the First Quarter</u>
------------------------	------------------	---------------------------------------------

- | | | | |
|---|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Summarize work accomplished outside of the SOW | WDFW will describe work done outside the Statement of Work, including work on StreamNet objectives that was not specifically described in the SOW, and work related to StreamNet that was done on other funding. | <p>The Data Manager completed the task of Region 5 Local Coordinator for the Combined Fund Drive, finished fundraisers and wrapped up for the year.</p> <p>The Data Manager attended the PDP training for the new performance evaluation system being implemented this spring.</p> <p>All WDFW StreamNet staff Attended the annual Science Division Workshop on October 12-13.</p> <p>The Project Manager participated in several CSMEP teleconferences to review FY 2006 work expectations and discuss plans for the FY 2007-2009 proposal. He also worked with the WDFW CSMEP team to re-form agency direction on the CSMEP Project for 2007-2009; a final draft of this direction was delivered to CSMEP Project Managers in December.</p> <p>The Project Manager assisted staff on the JSAP Project (resident fish stock assessment above Grand Coulee Dam) with FY 2006 work plan and budget elements for database work. He also participated in two meetings to lay out the three-year project vision for JSAP data collection, analysis, and dissemination. He directed a WDFW database developer to finalize changes to the 2005 WDFW JSAP data system and provided initial guidance to comprehending the complex Universal Database (UDB) structure.</p> <p>The Project Manager was asked to work with WDFW's Salmon Recovery Coordinator on a Strategic Data Initiative to modernize collection and provision of spawner survey and adult fin mark sampling data to standard headquarters data repositories. A variety of approaches are currently used in WDFW field offices; a series of meetings will commence in February 2006 to engage field staff participation in this effort. One result we expect is an increased flow of adult abundance data from eastern Washington into StreamNet datasets.</p> |
| 1 | Summarize work accomplished outside of the SOW | CRITFC will describe work done outside the Statement of Work, including work on StreamNet objectives that was not specifically described in the SOW, and work related to StreamNet that was done on other funding. | <p>A variety of other funding sources supported the Project Leader to: 1) participate on the NED and PNAMP steering committees, 2) attend ISAB meetings to, among other things, discuss monitoring, research, and associated data management issues, and 3) participate in technical groups related to recovery planning and the BiOp remand activities.</p> |

1 Summarize work accomplished outside of the SOW

MFWP will describe work done outside the Statement of Work, including work on StreamNet objectives that was not specifically described in the SOW, and work related to StreamNet that was done on other funding.

The Montana StreamNet Project Manager attended the OFWIM conference in Tallahassee and presented a paper and participated in a discussion group concerning the Comprehensive Fish and Wildlife Conservation Strategies. Following that meeting, an information management and strategy tracking addition was provided for the draft action plan of the Comprehensive Fish and Wildlife Comprehensive Plan (non-StreamNet funding).

Considerable effort toward the completion of the MFWP Game Damage Wildlife Incident Information System occurred, including regional trainings and production of a User's Manual. A web and a GIS Strategic Plan were both drafted.

We participated in the Montana Natural Heritage Program Partners Committee to develop an action plan for the program to follow.

We attended the Montana Information Technology Alliance conference in Helena.

We drafted a proposal for bird data management that would be funded by the SWG.

The agency completed the reorganization of all information services into the Information Services Division - StreamNet staff are part of the Information Management Bureau (IMB) within the Division.

We participated on the interview panel for the FWP Biometrician position that will be in the Wildlife Division but coordinate closely with the IMB.

1 Summarize work accomplished outside of the SOW

ODFW will describe work done outside the Statement of Work, including work on StreamNet objectives that was not specifically described in the SOW, and work related to StreamNet that was done on other funding.

The database application designed to track Restoration and Enhancement Program funding applications was completed and put into production this quarter at <https://nrimp.dfw.state.or.us/RE>. The application has an ArcIMS component that allows the user to produce map images related to their proposed application for funding. The electronic application will greatly increase the R&E Program's capacity to report, store, and use information provided by applicants, and it could aid restoration project data flow to StreamNet. Ongoing technical support and site updates were provided subsequent to the release of the site.

We continued to provide support to ODFW's Marine Resources Program (MRP), instituting requested changes regarding the online groundfish harvest status tracking system, including updating the fishery quota status website through November.

Oregon StreamNet staff support of the Statewide Wildlife Conservation Strategy (Conservation Strategy) continued throughout the quarter, mainly focused on providing data development through GIS and analytical support. Development of the draft ArcIMS web application (called the COA Explorer) to support the needs of the Conservation Strategy continued. The site provides access to the Strategy's Conservation Opportunity Areas (COAs), along with other relevant layers (e.g. habitat, vegetation). The development and potential uses of COAs for strategic conservation was presented to ODFW Wildlife Division staff, and has been accepted as a poster at the upcoming American Fisheries Society and The Wildlife Society meetings.

Assistance was provided to ODFW's Cougar Plan by developing statistics outlining the percentage of different habitat types which are zoned rural residential to help identify areas where human-cougar interactions could most likely occur. Staff also developed a series of maps showing habitat, vegetation, and wildlife management units to aid in plan development. Other Wildlife Division support included developing statewide vegetation and wildlife habitat data layers, and writing these to the wildlife geodatabase for greater agency access.

One NRIMP staff member (who is not funded by StreamNet) completed online training to start learning ASP.NET development, including the use of Visual Studio software and the C# programming language. This knowledge will be used to facilitate database access from ODFW ArcIMS sites, which will benefit the Comprehensive Wildlife Conservation Strategy and Oregon StreamNet-maintained sites.

NRIMP is assisting ODFW's Sage Grouse Project by developing an online application for recording, housing, and manipulating sage grouse lek (strutting ground) survey data.

NRIMP staff provided a great deal of support to the Technical Recovery Team's West Coast Salmon Recovery Planning effort. We enhanced an existing Recovery Planning spreadsheet application so planners can maintain, track, and share pertinent information, built a Recovery Planning Data Library to house existing and expected datasets, and linked the two together to allow planners to control versioning. The system also notifies specific individuals/groups when a specific action occurs (e.g. uploading of new data, a new user is added to the system, data are finalized, etc.) We also drafted a System Procedures Manual/User Guide for those involved. Our Data Analyst kept the information in the system updated, assisting recovery planning team members with their user accounts and discussing how to best get their information into the system, coordinated with Plan contributors to ensure they complied with established deadlines and content requirements, and posting documents for some contributors (which involves taking their document and breaking it into Plan section pieces, creating a metadata record in the Data Library for each piece, and posting the pieces).

We began gathering location and fish species data to add to ODFW's Oregon Fish Finder website, an online public resource for angling opportunities in Oregon.

The Project Leader presented three individual data and database management support proposals to the Oregon Plan Monitoring Team (OPMT): 1) distribution updates; 2) IMS site development for Oregon Plan datasets; and 3) designing data standards /database templates for watershed councils, and compiling watershed council data using the database templates. The proposal cover letter was revised to better describe how the proposed efforts support existing research, monitoring, and evaluation efforts, as requested by the OPMT. Lastly, he outlined three funding option packages, in case the OPMT supported any two or possibly all three of the proposals.

Staff continued to support the Oregon Plan Review (Metadata Warehouse) site and provide technical support to numerous users of the site. Data compilation of Oregon Watershed Council datasets continued at a lower level this quarter in support of the Oregon Plan Assessment. This included posting statewide documents to the NRIMP Data Clearinghouse website, and creating a metadata record

1 Summarize work accomplished outside of the SOW

The Region will describe work done outside the Statement of Work, including work on StreamNet objectives that was not specifically described in the SOW, and work related to StreamNet that was done on other funding.

for each.

The Regional GIS Specialist partnered with NOAA Fisheries on a project to build an interactive map application making available data developed as a part of the recently published Pacific Coast Groundfish Essential Fish Habitat EIS. The program website and map application will continue to evolve and are currently available at <http://marinehabitat.psmfc.org>.

The Regional Data Manager worked with a compiler in CDFG to QC and remove duplicate barriers from the StreamNet Barrier table.

Under NOAA-Fisheries funding, the Regional Fisheries Biologist supervised two field technicians hired to evaluate how well a habitat restoration projects database compiled by NOAA-Fisheries describes what is actually observed in the field. The goals of this work included determining the quality of data capture for such projects, estimating the completeness of the database, and estimating the density of completed projects on the ground. This work may be funded again in FY06 in order to finish this effort.