

StreamNet

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Fiscal Year 2001 Second Quarter Progress Report

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Introduction

This report presents accomplishments of the StreamNet project for the Second Quarter of Fiscal Year 2001 (January through March). The report is organized to clearly link accomplishments by the project participants to the tasks and responsibilities detailed in the FY 2001 Statement of Work. It is organized by objective and task for all project participants rather than by individual participant. Since not all tasks are addressed each quarter, and project participants often work on different tasks at different times, some tasks do not show activity in the Second Quarter. Those tasks with no activity are not listed in this report.

Project participants contributing to the StreamNet project were Columbia River Intertribal Fisheries Commission (CRITFC), US Fish and Wildlife Service (FWS), Idaho Department of Fish and Game (IDFG), Montana Fish, Wildlife and Parks (MFWP), Oregon Department of Fish and Wildlife (ODFW), Pacific States Marine Fisheries Commission (Region), and Washington Department of Fish and Wildlife (WDFW). The Shoshone-Bannock Tribes (SBT) have been a participant for a number of years, but they are currently fazing out their participation in the project due to other workloads, and were not active this quarter.

Objective 1 Data Development

Increase the knowledge base concerning the region's fish and wildlife resources through the acquisition of new information that responds to emerging needs as well as the updating and enhancement of production and survival trends and other existing information.

Objective 1 Data Development

Task 1 Anadromous Fish

Acquire data sets related to salmon, steelhead and, where data are readily available, other anadromous fish populations from the multiple agencies, tribes and organizations within the Columbia Basin and compile and maintain them in standardized, consistent formats for the following categories:

Objective 1 Data Development

Task 1 Anadromous Fish

SubTask 1.a Distribution, Life History (use type), and Barriers

Document the occurrence, distribution and habitat use of anadromous species, related barriers to migration, and life history characteristics

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Identify and update missing data in anadromous barrier data.	<ol style="list-style-type: none">1) Conducted initial compilation of trapping and tagging sites for Idaho Supplementation Studies, Bureau of Reclamation, Fish and Wildlife Service, state and federal hatcheries into a GIS layer for barriers. Will migrate to data exchange format later.2) Updated our diversions database to the current barrier data exchange format. Made corrections to some of the locations
ODFW	1 Update, maintain, correct and exchange barrier information.	<ol style="list-style-type: none">1) Incorporated updates to the Barrier table for the NE Oregon basins.2) Enhanced the forms and subforms in the barrier database.3) Drafted the data entry instruction manual for the barrier database.4) Contacted numerous ODFW field staff to obtain reference information for barriers contained in the database. This reference information is needed in order to submit these barriers to StreamNet.
ODFW	2 Update, maintain, correct and exchange anadromous fish distribution information (DistUse and DistPresence tables).	<ol style="list-style-type: none">1) Reconciled differences between Aquatic Inventory Project coho distribution and the existing NRIMP Coho distribution dataset for the lower Columbia.2) Submitted entire set of ODFW DistPres data and updated DistUse data to StreamNet.3) Modified spring chinook distribution in the upper Willamette in response to feedback from ODFW field staff.

ODFW	3 Modify / refine the automated approach to populating the FishBarrier table (as needed) and rectify any new anadromous distribution information with the barriers database.	1) Incorporated updates to the FishBarrier table for the NE Oregon basins. 2) Evaluated assumptions made as part of the automated FishBarrier attributing process.
ODFW	4 Design and develop a database to capture carcass placement data.	Duplicate task - information provided under Obj. 1, Task 5.b - Work Component 2.
ODFW	5 Update (and modify if needed) the Fish Presence Survey database which helps populate the DistPresence table.	Continued to enter data into the Fish Presence Survey Database which is designed to capture Oregon's upper fish distribution and culvert information collected by ODF/ODFW surveyors. To date, 2,485 records have been entered.
ODFW	6 Update (and modify if needed) the Incidental Fish Observation database, which captures incidental species observations not routinely reported in agency documents, which helps populate the DistPresence table.	Continued to enter forms as they came in - currently, 29 of the 101 records in the database are for Col. Basin streams. New information will not be processed and submitted to StreamNet due to budget cuts.
ODFW	7 Identify appropriate documents/references for anadromous fish distribution data in order to populate the DistPresence table.	Identified (and created references for) two dynamic databases that represent a significant new source of DistPres data. Ongoing management and maintenance efforts.
ODFW	8 Update, maintain, correct and exchange photographic information (MapCat and related tables).	Added 2 new barrier photos to the database.
ODFW	9 Populate the genetic origin and production origin fields in StreamNet distribution exchange format for all anadromous fish distribution data in the Columbia basin.	This task was dropped due to budget cuts. Standards and definitions need to be developed in order for this work to occur.
Region	1 Compile distribution updates (tabular events) as they arrive. Create anadromous fish distribution GIS coverages from these event tables, and post the shape files to the StreamNet website as downloadable GIS coverages.	1) Compiled, QA'd, and integrated complete ODFW anadromous update of DistUse data to the StreamNet database and online system. Created new GIS files from this information and posted these, along with updated documentation, to the StreamNet site for download. Compiled and updated revised total anadromous distribution GIS layer with this new information. 2) Compiled, QA'd, and integrated ODFW anadromous distpresence data set to the StreamNet database. 3) Revised database application to aggregate anadromous distribution, fixing errors and adding the capability to summarize this information by watershed (4th code HUC)

Region	3 Assist StreamNet partners with acquisition, development, formatting and submission of data.	Regional Staff helped WDFW staff read Quattro files that they were unable to open, and discussed coding for fish distribution with WDFW personnel.
WDFW	1 Review barriers in the anadromous fish distribution layer, based on SSHIAP information and indicators in the Stream Catalog. Update and exchange the data with the regional database.	Using Arc Explorer and the SDE coverages, Lensegrav prepared a stream barrier map for WDFW's Pat Hanratty. *O'Connor coordinated salmon and steelhead distribution updates for the Yakima Basin with Washington Conservation Commission, Yakama Nation, WDFW, and PSMFC-StreamNet staff, as part of the data compilation required for the NPPC's Rolling Review of the Columbia Plateau Province. Mapped updates will be integrated into WDFW-StreamNet coverages in late Q3 or early Q4, once WCC delivers the maps.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.b Adult Abundance

Escapement, redd counts, trap counts, dam counts, hatchery returns

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
FWS	1 Compile FWS hatchery return data for FWS hatcheries	Corrected problems with submitted hatchery return data
IDFG	1 Compile 2000-field season redd count data and 2000 field season hatchery return data and submit to the regional database.	<ol style="list-style-type: none"> 1) Started process to tie chinook and steelhead redd count transects to 100k LLID routes. Converted map of redd count transects to PowerPoint for review by Fisheries Bureau. Made corrections. 2) Created an ArcView project to facilitate continued transect definitions. 3) Implemented data entry and edit screens. Used these to start reviewing and editing existing redd count data for future migration to data exchange format.
ODFW	1 Update existing abundance and index trends (escapement, redd counts, trap counts, peak/other spawning counts, etc.) for anadromous species through 1999 and modify as needed to adhere to the 2000.2 Data Exchange Format. Four data submissions are planned.	<ol style="list-style-type: none"> 1) Added 42 new trends (8 Adult Return - Peak/Other Spawning counts, 10 Adult Return - Dam/Weir counts, and 24 Adult Return - Redd counts. 2) 2064 records were identified with some magnitude of coding errors by either ODFW staff or StreamNet staff. The data was reverified using reference material and corrections were made. These corrected trends will be submitted to the StreamNet database along with the added and updated trends in April.
ODFW	2 Compile data on returns to ODFW hatchery facilities (updated for 1997, 1998, and part of 1999 returns).	No effort was made this quarter - no database manager was on staff.

WDFW 1 Update and exchange hatchery returns through 1999 in StreamNet data exchange format.

1) Didn't add this back from budget cut until Q3 but in January, Sikora and Woodard confirmed for Kinney that 6 trends were incorrectly coded to an obsolete RefID and needed to be changed to RefID 10164. The returns data was not re-exchanged for this correction and Kinney, Sikora and Woodard just corrected their own databases accordingly.

2) Sikora organized her hatchery returns files and gave Woodard all pertinent information since he is the lead on returns data. She also helped Woodard get a copy of WDFW's Hatchery Division 1999 Hatchery Escapement (returns) report. Woodard also collected and rolled up the Hatchery returns data for return years 1999 and 2000 from WDFW's Form 5 database. This data is in the exchange format but it needs to be proofed and a discrepancy with the Final Hatchery Division report needs to be resolved. Unfortunately, error tracking is an ongoing process. Another look at the 1996 data is needed, as this was the startup year of the Form 5 database and errors prevail.

WDFW 2 Update and exchange natural spawner data (returns and/or redd counts) through 1999 for available species (CR, PS)

1) In January, Sikora sent Emily Greenberg (StreamNet data user) the correct Lewis River basin steelhead data. She also clarified how the data will appear in the next data exchange to accommodate new DEF format potential for previously exchanged data that used two records to report a count\mile TypeID and Redd Count TypeID for the same area.

2) Woodard collected Columbia River escapement estimates for the 2000 return and put the data into report form for entry into the escapement database. Final numbers are not complete yet for the Lewis River. Changes are due in June. He also collected Puget Sound escapement estimates for the 2000 return year for chum and pinks and entered the data into the escapement database.

3) In January, Sikora re-directed Jim Cummins' Yakima basin escapement data from Lensegrav to Woodard to compare it to his data and include as warranted. Woodard was retasked for this job since the files could be linked to several of his datasets, leaving him more equipped than Lensegrav to make the comparison. In March, Sikora helped Woodard to find more potential redd count data, revealing escapement data from WDFW's Bruce Sanford. O'Connor also passed the data to WDFW's Ann Blakely and Bill Gill to research the compatibility with SASSI data. Blakely and Gill saw enough differences to inspire their intent to work on coordination.

4) Smith returned to StreamNet work Jan. 16th after time on another project. She marked for deletion 60K PSMFC trends WDFW already had covered by 100K. In February, Smith compared the Puget Sound pink and Chinook data with her B11X escapement database and the PSMFC 60K trends.

5) Smith also contacted Travis Nelson and asked for Puget Sound chum and pink escapement data. Sikora gave Woodard and Smith a file with tentative TrendStatIDs, summarizing the data gaps for the current salmon data file to aid the HistStatID assignments. Late February and March, Smith researched which codes should be assigned. Her review of the gaps revealed that some data records were missing and not just gaps in WDFW's raw data collection. Smith contacted Travis Nelson about missing Puget Sound chum data. This data was located and completed.

6) Late in March, Smith organized data to be entered into the new escapement database.. She built relationships between the separate trend and natural spawner tables, created and linked look-up tables, and made the new data entry form. Once the database was up and running, Smith started entering back logged escapement data and all known TrendStatIDs and HistStatIDs. She compared the Puget Sound Chinook data from Bruce Sanford with the SASSI stock information for similarities.

7) Lensegrav started collecting life cycle information for the anadromous species and drafted visual aids to display the cycles. Aids will be revised if warranted to become the best quick reference for these species' cycles because it can give clues about data accuracy and predict data availability.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.c Juvenile Data

Sample records, abundance indices (as available)

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Finalize the incorporation of the IDFG General Parr Monitoring (juvenile) data into StreamNet.	Began development of Juvenile Trap Operations interface for Idaho Supplementation Studies.
ODFW	1 Prepare and submit recommended modifications of the draft Juvenile abundance portion of the DEF.	This task was dropped due to budget cuts.
ODFW	2 Update Oregon's 10 existing juvenile abundance records to approved DEF standards.	No work has been accomplished in this area. ODFW staff is awaiting a format change to the juvenile abundance record requirements and interface form design.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.d Harvest

In-river, terminal, and other harvest, as available

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
WDFW	1 Update and exchange salmon harvest data through 1999, beginning with Columbia River commercial, sport and treaty harvest.	Didn't add this back from budget cut until Q3 and no work to report for this period.
WDFW	2 Update and exchange steelhead harvest through 1998.	N/A - didn't add this back after budget cut.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.e Hatchery Production

Releases and disposition

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
FWS	1 Compile FWS hatchery release data, w/ added CWT information	Continued compiling hatchery release data
FWS	3 Submit 2000 data to PSMFC via USFWS WWFRO	Submitted hatchery release data for CY 2000
IDFG	1 Compile 2000-field season hatchery returns data.	Began migration for moving legacy hatchery return data into the new data exchange format.
ODFW	1 Develop the ability to remotely access the Portland mainframe hatchery database and download hatchery return data consistent with the StreamNet contract.	No effort was made this quarter - no database manager on staff.
ODFW	2 Compile egg-take data into StreamNet format and submit to PSMFC.	No effort was made this quarter - no database manager on staff.
Region	3 Acquire hatchery production data through 2000 from the RMIS database and incorporate into the StreamNet on-line database.	The RMIS Hatchery Production database was acquired in March, 2001. Existing routines built to convert the Pacific Salmon Commission's Data Exchange Format 3.2 into StreamNet's DEF 99.1 do not readily produce data in the current DEF 2001.1 because they used PSC Code to River Reach Code conversion tables. A PSC Code to LLID conversion table needs to be created. WDFW has stated that this cross-reference table is under construction for Washington State. Many combined-location "SuperCodes" are required by the rolled-up Coded-Wire Tag releases in the RMIS system. The required PSC Code to StreamNet LLID conversion process will be much more accurate and the resulting information will be much easier to map if "unrolled" release data could be provided to StreamNet either in PSC Data Exchange Format or in StreamNet DEF.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.f Natural Production

Survival, production factors, spawner recruit

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	2 Compile spawner-recruit data (updated for spring chinook surveys in 1998 and 1999, and available time series for fall chinook and coho returns)	This task was dropped due to budget cuts.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.g Age

Age/sex composition for returning adults

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
FWS	1 Update age and sex data through 2000	Corrected problems with submitted Age data
IDFG	1 Compile 2000-field season age and sex composition data.	Researched legacy age data and began revising data structures for migration to the new data exchange format.
ODFW	1 Compile age frequency data (updated for natural spring chinook in 1998, available time series for natural steelhead in OR portion of Columbia basin).	This task was dropped due to budget cuts.
WDFW	1 Provide age/sex data associated with exchanged CRB natural returns data.	Didn't add this back after budget cut until Q3.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.h Genetics

Areas where genetics data exists and the sources of these data

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Develop, with SC input, standardized database format and DEF for existing regional genetic data	Coordinate with Montana Fish, Wildlife and Parks and University of Idaho on genetic data formats used for resident fish. Obtained coastwide salmon genetics database from NMFS which was used when developing listings under the Endangered Species Act.
CRITFC	2 Provide allozyme and genetic data developed by CRITFC in standard format	No work this quarter. Waiting to obtain data from other entities and integrate information into a proposed DEF.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.i Populations

Population delineation, as determined by others

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	1 Produce a cross-reference table of ODFW designated Gene Conservation Groups (GCG) by subbasin.	This task was dropped due to budget cuts.
WDFW	1 Compile and exchange updated Washington SaSI stock status data for anadromous fish using newly developed 2000.1 Data Exchange Format (see Task 2.3).	O'Connor summarized SaSI stock status data conversion pilot work and sent it to Stan Allen. Our fish distribution coverage was found to be out-of-synch with the identified SaSI stock spawning areas, and re-alignment work was undertaken. Other funding deadlines for key staff postponed completion until Q3 or Q4.

Objective 1 Data Development Task 1 Anadromous Fish

SubTask 1.j Historic Range

As available at the watershed-level. Compilation at the reach level is an option if these data are available

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	1 Work with the Steering Committee to define the term "historic" in the DEF.	Received and reviewed the Oregon portion of National Native Freshwater Fish distribution database from the Natural Heritage Program

Objective 1 Data Development

Task 2 Resident Fish and Other Aquatic Species

Acquire data sets related to resident fish species, and where specifically identified other aquatic species, from the multiple agencies, tribes and organizations within the Columbia Basin and compile and maintain them in standardized, consistent formats for the following categories:

Objective 1 Data Development Task 2 Resident Fish and Other Aquatic Species

SubTask 2.a Distribution and Life History

Document species occurrence and distribution and life history characteristics

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Add additional distribution information from references, collecting permits and stream and lake surveys for resident fish.	1) Fisheries staff continued data entry into reference and collecting permit modules. 2) Conducted initial compilation of trapping and tagging sites for Idaho Supplementation Studies, Bureau of Reclamation, Fish and Wildlife Service, state and federal hatcheries into a GIS layer for barriers. Will migrate to data exchange format later. 3) Updated our diversions database to the current barrier data exchange format. Made corrections to some of the locations

MFWP	1 Complete conversion of distribution data for all fish species to measures using the routed hydrography in western Montana and eastern Montana when it becomes available. These data were collected from biologists in FY2000.	Completed fish survey edit/entry for Federal and Consulting biologists to provide for easier incorporation of their fishery data.
MFWP	2 Provide distribution data in DEF to StreamNet when completed.	Completed 3-01.
MFWP	3 Determine a schedule for updating data in the future and at what frequency data needs to be collected from field biologists, also addressing species of special concern.	Ongoing
MFWP	4 Collect and catalog supporting references to document distribution and connect distribution to reference.	Ongoing
MFWP	5 Explore the development of a standard field survey form to be used by state and federal biologists to record occurrence information.	Completed database structure for Federal and consulting Biologists that will be required as a condition of a state collectors permit. This might make a survey form a mute point for these biologists as we will then get the data in out required format.
MFWP	6 Continue to work with regional StreamNet staff and SC to develop/modify/add to a resident fish data exchange format if not completed in FY2000.	This effort is still underway.
ODFW	1 Update, maintain, correct and exchange resident fish distribution information (DistUse and DistPresence tables).	Updated Bull Trout DistUse data to bring it current with the data that is managed by Mary Hanson.
Region	1 Compile distribution updates (tabular events) as they arrive. Create and maintain distribution GIS coverages from these event tables and distribute these via the StreamNet web site.	QA'd Montana resident distribution (DistUse) data submission and returned results to MFWP StreamNet component for verification.
Region	2 Assist StreamNet partners with acquisition, development, formatting and submission of data.	The Program Manager contacted FWS staff to determine the definitions used for bull trout distribution on a region wide basis. Currently, bull trout are administered by the individual state offices, and so far there has been no attempt to standardize distribution information. This remains an area needing further work to achieve any consistent regional data set on bull trout occurrence.

WDFW	1 Update and exchange statewide updated bull char distribution data at 100K resolution (see Task 2.3).	<p>1) O'Connor responded to a Steering Committee e-mail discussion on bull trout (char) taxonomic and management distinctions in Washington state with clarifying comments and sections from a WDFW report. Discussions eventually raised issues of cross-state bull trout distribution data not matching up well, and the larger issues of coordinating distribution and use criteria for critical resident species. WDFW criteria were shared with other Committee members, and a start at compiling and integrating the criteria was initiated.</p> <p>2) In late March, USFWS staff ordered WDFW to halt release of Washington bull trout distribution and use data, pending resolution of areas of dispute in Western Washington. Conversion of data to StreamNet formats and compilation of references has begun, but exchange of these data with StreamNet will be delayed until at least Q3.</p>
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Objective 1 Data Development Task 2 Resident Fish and Other Aquatic Species

SubTask 2.b Adult Abundance
Escapement, redd counts, trap counts, dam counts

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Coordinate with IDFG personnel to determine the feasibility of incorporating resident adult abundance.	Fisheries staff continued data entry into reference and collecting permit modules. Captured abundance data where it was available
MFWP	1 Enter 2000-2001 stream fisheries survey data collected for population trends; genetics and escapement, redd counts, trap count and other counts during visits to biologists.	Entered/edited some genetic and survey information statewide.
MFWP	2 Collect references for each survey.	Work continued through the quarter.
MFWP	3 Provide data in data exchange format to regional StreamNet staff. Data not ready to exchange.	
ODFW	1 Update existing abundance and indices trends (escapement, redd counts, trap counts, peak/other spawning counts, etc.) for resident species through 1999 and modify as needed to adhere to the 2000.2 data exchange standards. Four data submissions planned.	No work has been done to update existing resident trends. We have 37 trends coded as resident species. Of these, 2 are resident cutthroat, 22 are white sturgeon, 1 is bull trout, and 12 are green sturgeon.

Region	1 Assist StreamNet partners with acquisition, development, formatting and submission of data.	<p>1) Shannon Hurn of ODFW reported several difficulties in making the StreamNet Trend User Interface function with the ODFW database. Regional Fisheries Biologist Mike Banach and CRITFC database manager Hilary Forrest assisted ODFW with these problems, which were mainly related to bad interactions between the interface and a properly set up backend database. Several small programming problems were corrected in the Trend User Interface. Mike Banach and Hilary Forrest traveled to Corvallis to meet with Shannon Hurn in person and examine the errors occurring. These three were able to fix all problems, none of which have re-occurred.</p> <p>2) The Oregon Department of Environmental Quality has developed an on-line tool, similar to the StreamNet Event Mapper that can be used to determine an LLID and measure from the mouth of points along a stream. Regional personnel tested this application for its potential use and to determine if we may want to develop a similar application or use this one. Evaluations are continuing.</p>
WDFW	1 Explore opportunities to compile, convert, and exchange portions of the Yakima Basin juvenile and adult abundance data from Ken Ham.	N/A - didn't add this back after budget cut.

Objective 1 Data Development Task 2 Resident Fish and Other Aquatic Species

SubTask 2.c Angler Use
Fishing pressure, creel census

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Add FWP 1999 angler survey data collected by MFWP mail survey to MRIS.	Completed.
ODFW	1 Evaluate available creel data for appropriateness and fit into the StreamNet format.	This task was dropped due to budget cuts.

Objective 1 Data Development Task 2 Resident Fish and Other Aquatic Species

SubTask 2.d Hatchery Production
Hatchery production (releases and outplants) for salmonids

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Update StreamNet hatchery outplant data in the data exchange format with 1999 data from the FWP Information Services Unit Hatchery Database, if changes are made.	Data are available for Montana. No request has been received from the region for the information, and the DEF is not complete for resident fish.

Objective 1 Data Development

Task 2 Resident Fish and Other Aquatic Species

SubTask 2.h Status

Population stability index

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Assist regional and state data managers in developing data exchange format.	Reviewed hatchery release DEF
MFWP	2 If DEF adopted, submit bull trout, arctic grayling and westslope and Yellowstone cutthroat trout data.	All fish distribution sent this quarter including those mentioned above.

Objective 1 Data Development

Task 3 Habitat

Acquire data sets related to fish habitat from the multiple agencies, tribes and organizations within the Columbia Basin and compile and maintain them in standardized, consistent formats for the following categories:

Objective 1 Data Development

Task 3 Habitat

SubTask 3.a Stream / Watershed Habitat

Incorporate applicable stream and watershed level habitat and stream survey data, as these become available

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Develop a statewide stream survey form based on information provided by Montana state and federal fisheries biologists in FY2000.	Ongoing
MFWP	2 Work with regional StreamNet staff on data exchange format, if sufficient interest and/or data.	Ongoing

Objective 1 Data Development

Task 3 Habitat

SubTask 3.b Water Quality

Incorporate existing Clean Water Act 303(d) data and other water quality data as applicable

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
Region	2 Maintain GIS water quality data event tables from the 303(d) data on the StreamNet web site.	Reviewed new Oregon DEQ 303(d) information for mistakes and format and reported to OR DEQ and EPA. Incorporated this new information with existing data for StreamNet use in comparisons to fish distribution.

Objective 1 Data Development Task 3 Habitat

SubTask 3.c Miscellaneous Habitat Data

Develop data for miscellaneous habitat related information, as available

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	1 Update key stream management area designations for OR including FEMAT key watersheds, AFS aquatic diversity areas, ODFW coho source river reaches, ODSL essential salmon habitat and Priority Areas.	This task was dropped due to budget cuts.
ODFW	2 Track the progress of ODFW aquatic habitat prioritization model and provide a URL for StreamNet to link to model results when they are available.	1) Provided technical support to the ongoing ODFW process to identify "salmonid emphasis areas" on the coast. (Bowers) 2) Provided written comments for a discussion about coastal Priority Watersheds development that could not be attended in person.

Objective 1 Data Development

Task 4 Facilities

Acquire data sets related to fishery-related facilities and structures from the multiple agencies, tribes and organizations within the Columbia Basin and compile and maintain them in standardized, consistent formats for the following categories:

Objective 1 Data Development Task 4 Facilities

SubTask 4.a Dams and Fish Passage Facilities

Enhance the existing StreamNet dams data set by updating relevant data from the Pacific Northwest Hydropower Database and Analysis System (NWHS) and the National Inventory of Dams

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Incorporate enhanced dams data into StreamNet.	
MFWP	1 Combine the StreamNet dams dataset with dams named in the GNIS and the National Inventory of Dams, and exchange Montana's data.	Received data and DEF in Kalispell. Will begin working on in 3rd quarter.
ODFW	1 Update, maintain, correct and exchange dam information (as part of the Barrier database).	Enhanced the forms and subforms in the Barrier database.

SubTask 4.b Hatchery Facilities

Update and maintain a dataset on anadromous and resident hatchery facilities containing information on location, design, management and authorization

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
FWS	1 Update hatchery facility records as needed	No corrections or additional information were submitted this quarter.
IDFG	1 Incorporate supporting hatchery structures, such as weirs and traps, into StreamNet.	Implemented hatchery facilities data entry and edit screens. Started revision of data structures for new data exchange format.
MFWP	1 Provide update of these data if changes have occurred in Montana's facilities.	Duties transferred to Jeff Hutten; received data and DEF. Progress will begin next quarter.
ODFW	2 Review and update Oregon hatchery facilities data and submit to PSMFC.	1) Continued to contact hatchery facilities trying to get updated information. 2) Updated 6 hatchery facility records 3) Updated the Hatchery Contact List.
Region	1 Maintain spatial aspect of hatcheries table including location of hatcheries and GIS data. Assist states in tying hatcheries to LLID-based stream locations when requested.	Captured hatchery locations in the Yakima subbasin for a mapping request for the Yakama tribe and submitted this information to the WDFW StreamNet component.
WDFW	1 Provide standard geo-spatial coordinates (Longitude-Latitude) for each facility.	In response to an issue involving assignment of SiteIDs to fixed (hatchery) sites, O'Connor contacted Bill Kinney and David Graves about the possibility of carrying and using both a CountyID and a SiteID on such data records, to better serve clients who seek the data from two different perspectives. The current Online system uses a single ID approach; further discussion was deferred until we gained experience with the dataset once exchanged and loaded for access.

WDFW	3 Complete, convert, and exchange tabular and spatial data tables of Washington state hatchery facilities, including federal and tribal stations.	<p>1) In January, Sikora and O'Connor met to discuss the status of hatchery facilities. Dean Morrow and Darrell Mills of WDFW's Hatchery Division assisted Sikora, confirming the locations of various hatchery facilities. Sikora corrected the GIS system and tabular management file (Ohatfac.db), accordingly. In February, Bruce Watson of the Yakima Tribe sent David Graves dams and hatchery facility location information and we planned to address these additions (and further questions for Darrell Mills) when we continued the BegFt work in March. That plan suffered delays.</p> <p>2) In March, Sikora planned to prioritize the facility work and also use StreamNet's event mapper to identify BegFts for Washington's facilities but problems adding our facilities as a background layer weren't resolved until April. While Martin worked out misc. issues, including the necessary projection factors, Lensegrav's time for this work was re-prioritized. We must renew this effort at the next opportunity. Through the trial and error, Lensegrav and Sikora continually documented how to maneuver the ARC software and Event Mapper to obtain shape files and update event mapper.</p> <p>3) Sikora sent Cheri Howe of DNR the GIS metadata documents when her interest focused on WDFW's facility codes.</p>
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Objective 1 Data Development Task 4 Facilities

SubTask 4.c Diversion/screening
Develop a data set for water diversions and screening

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Review regional data exchange format.	We propose to remove this from the workplan. NRIS is responsible for this dataset. StreamNet can access it over the web.
MFWP	2 Provide input and data to watershed planning projects.	We propose to remove this from the workplan. This is not a StreamNet database responsibility in Montana.
ODFW	1 Develop a database structure and compile Oregon's fish screening data and submit a draft data exchange format to SC for review and adoption.	Continued database development. Met twice with the ODFW State Fish Screening Coordinator and once with the ODFW State Fish Passage Coordinator and other staff members. Prepared and gave a presentation on the preliminary version of the database. Created and distributed a database structure report to ODFW Fish Screening and Passage Program staff members.
ODFW	2 Identify fish screening data that is appropriate for the StreamNet site and submit test records once an exchange format has been adopted.	This task was dropped due to budget cuts.

Objective 1 Data Development

Task 5 Habitat Restoration/Improvement Projects

Acquire data sets related to habitat restoration / improvement projects from the multiple agencies, tribes and organizations within the Columbia Basin and compile and maintain them in standardized, consistent formats for the following categories:

Objective 1 Data Development

Task 5 Habitat Restoration/Improvement Projects

SubTask 5.a Fish and Wildlife Program Projects

Prepare and maintain standardized data relating to tracking aquatic management and restoration projects related to the Fish and Wildlife Program

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
MFWP	1 Data will be updated for FWP Projects during FY-01; the spatial data layer of project location will be updated.	Conversion program created by Jeff Hutten; data exchanged. Several projects with missing dates.
Region	3 Assist StreamNet partners with acquisition, development, formatting and submission of data.	Discussed coding conventions for various work types with several StreamNet partners.
WDFW	1 Follow-up from FY2000 habitat restoration project compilation	Lensegrav prepared more instruction for Stan Allen on the prototype Internet Web Guide by building relationships in the mdb.

Objective 1 Data Development

Task 5 Habitat Restoration/Improvement Projects

SubTask 5.b Other Projects

Prepare and maintain standardized data relating to tracking aquatic management and restoration projects other than related to the Fish and Wildlife Program

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Compile additional information from non-FWP restoration projects into StreamNet.	1) Performed a series of update queries on the latest MitProjects database in order to update codes and values for WorkTypeID. 2) Continued to pursue Forest Service SOPA data. Met with USFS staff to discuss the forests entering their SOPA log data into a GUI the incorporates MitProjects data exchange format. 3) Modified the projects database so that the USFS can use in Access2000. Delivered to USFS staff along with the StreamNet data exchange format.
MFWP	1 Update Montana's Fish and Wildlife habitat restoration projects into StreamNet's Restoration and Mitigation database and submit in data exchange format.	Conversion program created by Jeff Hutten; data exchanged. Several projects had missing dates.

ODFW	2 Design and develop a database to capture carcass placement data for Columbia Basin activities.	A working beta version of the Carcass Placement Database has now been completed. A meeting was held during the quarter with carcass placement management staff to review the management program and the database features. Hurn and Brodeur collaborated on the design and the database creation.
ODFW	3 Provide technical assistance to GWEB and StreamNet staff as needed to make compilation of ODFW habitat restoration/ improvement projects in the Columbia basin more efficient.	Responded to questions regarding habitat restoration data updates.

Objective 1 Data Development

Task 6 Sub-basin Planning

Develop consistent data sets and information that are particularly suitable and useful for regional sub-basin planning and make them readily available for planners

Objective 1 Data Development

Task 6 Sub-basin Planning

SubTask 6.a Provide data for Sub-basin Planning

Organize and distribute the available fish, wildlife and habitat data in a standardized format for use in Sub-basin Planning or other regional planning efforts

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Coordinate with sub-basin planning efforts to supply data.	Provided data requests from our Fishery Information System for subbasin planning efforts in the Palouse, Clearwater and Salmon subbasins.
MFWP	1 Provide data to planners on request	No requests have been received to date.
ODFW	1 Participate in discussions concerning data needs to support sub-basin planning or other processes adopted by the amended Fish & Wildlife Program. Modify data plan and priorities as needed to be responsive.	Communicated with ODFW staff to discuss the Columbia Basin Subbasin Summary GIS mapping needs (Bowers & Cooney).
ODFW	2 Provide consultation services and assistance to ODFW data managers to assist them in meeting Subbasin Planning needs.	<ol style="list-style-type: none"> 1) Provided extensive mapping and GIS support to Subbasin Summary planning efforts in the Deschutes, John Day, Umatilla, Walla Walla and Grande Ronde basins. 2) Experimented with ArcView output image formats to obtain the highest quality image output that would import into MS Word. 3) Worked with Shelly Snyder of WDFW to fill a request for Oregon DEM data for her subbasin mapping efforts in the Walla Walla and mainstem. 4) Processed Oregon and Washington landcover data for the Grande Ronde basin as part of the subbasin mapping effort.

Region	1 Meet with sub-basin planners to discuss data types that may be needed, data sources, and to plan integration methods of the various data sets. Assist planners acquire needed fisheries data	Completed coordination with Council staff to put together a project to custom summarize all data in the StreamNet database for each of the individual subbasins. A contract was developed to complete this work during the summer using staff that would otherwise have been funded on other contracts to do other work.
Region	3 Provide StreamNet GIS coverages or other data (on request) to the entities conducting sub-basin planning. Assist subbasin planners with use of this data as needed.	<p>1) Information and StreamNet data packages were completed for the subbasins in the Columbia Plateau Province (Mainstem Columbia, Crab, Deschutes, John Day, Palouse, Rock, Mainstem Snake, Tucannon, Umatilla, Walla Walla, and Yakima subbasins), the Blue Mountain Province (Asotin, Grande Ronde, Imnaha, and Mainstem Snake subbasins), the Mountain Snake Province (Clearwater and Salmon subbasins), the Cowlitz subbasin in the Lower Columbia Province, and the Okanogan Subbasin in the Columbia Cascade Province. Hard copy maps and CDs with the data in spreadsheets and with GIS data layers were prepared for each subbasin and delivered to each of the subbasin planning groups.</p> <p>2) Data were custom assembled for the Rock Creek subbasin at the request of CBFWA for use in a subbasin assessment specific to this drainage.</p> <p>3) A package of specialized maps were made for the Yakima and Rock Creek subbasins for inclusion with subbasin assessment reports. This task involved substantial work in converting textual descriptions of current and historic species extents from the Yakama tribe into a mappable format.</p>

Objective 1 Data Development

Task 6 Sub-basin Planning

SubTask 6.b Capture information from Sub-basin Planning

Acquire information developed during subbasin planning to update anadromous fish, resident fish, and wildlife data sets

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Develop applications and procedures to update watershed assessment data during subbasin planning	No work this quarter. Regional discussions on final subbasin assessment guidelines and tools are proceeding slowly.
MFWP	1 Collaborate with regional staff and Montana CBFWA representative when data become available	Subbasin planning is not yet underway.
ODFW	1 Evaluate Subbasin Summaries and other Subbasin Planning related documents related to Oregon, identify data which are not contained in StreamNet and adjust staff work plans to capture new data if appropriate and applicable.	This task was dropped due to budget cuts.

Objective 1 SubTask 6.b

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Region 1 In collaboration with CRITFC staff, provide subbasin planners Gathered textual information on historic and current distribution of

with computer applications to enter and edit information developed during subbasin planning as described in Tasks 1.1 through 1.5 above.

anadromous species and hatchery facilities in the Yakima subbasin based on information from the Yakama tribe. Converted this information into a standard format and submitted to the WDFW component of the StreamNet project for reconciliation with their information.

WDFW	1 Provide data compilation, conversion, and analytical services in support of the subbasin assessment process, the NMFS Viable Salmon Populations model, and related NWPPC needs.	Didn't add this back after budget cut until Q3.
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Objective 2 Data Management and Delivery

Provide high quality data management services, with specific emphasis on the creation of regionally consistent data sets and the timely delivery of data to users in formats that meets their policy, planning, and management needs

Objective 2 Data Management and Delivery

Task 1. Database Management

Maintain functional database programs at the state and regional levels to make consistent data sets for anadromous fish, resident fish and to a lesser extent wildlife available through the StreamNet online database system. At both the regional and state levels, provide database management and administration necessary for accomplishing StreamNet objectives, to include: 1) maintaining regional and state-level StreamNet data sets, 2) processing exchange data into the regional database, 3) transporting data to the SQL environment, 4) enhancing StreamNet database structures and capabilities, and 5) providing programming services to project participants to allow for efficient data entry and transfer.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 After beta testing, implement Fish Information System in IDFG StreamNet and IDFG Fishery Bureau	1) Developed an Access database and GUI to track data requests. 2) Continued development of Fish Information System including development of data entry and edit screens for Reference Module, Collection Permits, Hatchery Facilities, Juvenile Trapping Operations, and an interface to the PTAGIS database.
IDFG	2 Continue development and improvements to Fish Information System.	See work component 1. These are basically the same tasks.
MFWP	1 Provide state-level data management services, emphasizing coordination with StreamNet regional staff, MFWP and other state and federal natural resource agencies and encourage the use of consistent data attributes and data sets among all agencies.	Ongoing.

emphasis on creation of regionally consistent data sets and the timely delivery of data to users in formats that meet their policy, planning, and management needs.

MFWP	3 Update existing data sets as described in Task 1 and provide dataBull Trout barriers and Western Montana Fish distribution data were sent to the regional StreamNet office in DEF. Provide data as sub-sets to the StreamNet regional office. are updated rather than waiting for entire data to be complete.	
ODFW	1 Provide state-level StreamNet database management / administration / development. Enhance StreamNet and ODFW database structures, interfaces, tools, and capabilities as needed.	<p>1) Worked to develop ArcView / Access tools to facilitate data capture directly from field biologists without having to use hardcopy maps as an interim step.</p> <p>2) Worked with Mike Banach and Hilary Forest to enhance the Trend Interface, version UI-3-b4. Errors in the joining of tables in the backend database and interface were corrected. Interface design errors were also found and corrected. More problems were encountered in March and are currently being resolved through collaboration with StreamNet staff.</p> <p>3) Enhanced the Riparian Lands Tax Incentive Program database user interface.</p> <p>4) Developed an example of how we might compile life-stage timing data.</p>
ODFW	2 Develop custom GIS products and database structures that help improve data management and transfer with ODFW staff.	Updated online 8.5 x 11 PDF maps of salmonid distribution data by 4th field hydrologic unit. Updated web interface to facilitate access to these maps.
Region	1 Maintain and manage the StreamNet database so information / data are available internally to project participants and externally via Internet.	Routine management and maintenance of the StreamNet database and online query system were continued in order to continue availability of data via the www.streamnet.org website.
Region	2 Add data submitted to the StreamNet regional office into the SN database within ~30 days of receipt from the project partners.	The data provided to the StreamNet regional office, as detailed in the individual project accomplishments under Objective 1, were incorporated into the StreamNet database.
Region	3 Assist data-providing agencies with error checking of data sets.	<p>1) Regional personnel found hatchery return records with no values. The Regional Database Manager consulted with ODFW to determine the proper steps to take, and the errors were corrected in both databases.</p> <p>2) Regional personnel conducted various data integrity checks of the existing data in StreamNet. One of these was a list of data category and data type, in order to ensure they matched correctly. A number of instances of mismatched categories and types were found. These possible discrepancies were relayed to the appropriate data providing agencies, who made necessary corrections and then resubmitted those data to the central StreamNet database.</p>

	ensure that data submitted are usable, scientifically sound, and consistent.	tables, ensuring that duplication, ambiguities, and errors were minimized. (Species; habitat restoration; others)
Region	5 Update the database structure as new data categories are added or categories are changed.	The StreamNet database continued to change in order to optimize the new web query system based on LLIDs through the use of views to create binary lookup tables and stored procedures to generate a matrix of all data combinations for the Web Query System. Work was done to synchronize the database structure with the Data Exchange Format. Preparations for a new database server were also made.
Region	7 Document all additions/changes to data structure, exchange formats, interface tools, etc.	1) Compared the current Data Exchange Format to the current tables in the SQL database. Where discrepancies were found, appropriate changes were made in the DEF or the SQL tables. The changes to the DEF were presented to the Steering Committee, and they were accepted for inclusion in the DEF. The new DEF version was accepted for adoption, pending minor changes, at the March Steering Committee Meeting in Olympia, Washington. 2) Many minor changes to the DEF were performed, both in anticipation of the Steering Committee meeting and after the meeting. Many changes were performed which were not substantive in regards to the database structure, but hopefully will make the document easier to use and navigate within. Attempted to automate creation of an appendix to the DEF which would house all lookup codes, but was unsuccessful.
Region	8 Develop metadata for all spatial data sets posted to the StreamNet GIS web page.	Updated metadata for anadromous distribution layers and lakes layers to document changes to these themes.

Region	10 Provide programming services to project participants to assist with efficient data entry and data transfer	<p>1) Shannon Hurn of ODFW reported several difficulties in making the StreamNet Trend User Interface function with the ODFW database. Regional Fisheries Biologist Mike Banach and CRITFC database manager Hilary Forrest assisted ODFW with these problems, which were mainly related to bad interactions between the interface and a properly set up backend database. Several small programming problems were corrected in the Trend User Interface. Mike Banach and Hilary Forrest traveled to Corvallis to meet with Shannon Hurn in person and examine the errors occurring. These three were able to fix all problems, none of which have so far re-occurred.</p> <p>2) The Oregon Department of Environmental Quality has developed an on-line tool, similar to the StreamNet Event Mapper, which can be used to determine an LLID and measure from the mouth of points along a stream. Regional personnel tested this application for its potential use, and to determine if we may want to develop a similar application or even use this one. Evaluations are continuing.</p>
Region	13 Ensure georeferencing of data is accurate and complete.	<p>1) Regional personnel encountered errors in the GIS cross-reference tables. The Regional GIS Specialist was informed, and made the appropriate corrections, as well as informing the state partners as necessary.</p> <p>2) Reviewed, and corrected where necessary, georeferencing for multistream and coastal port trend data locations.</p>
WDFW	1 Washington state data maintenance and exchange support services, including updated exchange format system, support for MS Access 97, and support for new data categories and fields.	<p>1) Before we temporarily lost Brown to another project, Lensegrav met with Brown to discuss general compiling issues and ideas for programmed tools. Sikora starting building a summary of how to perform standard Paradox maneuvers in MS Access. Lensegrav started building Directory.db to clarify the purpose and location of relevant files frequently used by StreamNet staff.</p> <p>2) Brown finished memotool.fsl, started fieldcompare.fsl and started requested revisions on casetext.fsl, while Sikora tested and edited the on-screen help for the tools. Memotool either counts the maximum characters used by the longest field entry or compares memo field entries in a single table. Fieldcompare makes it easier for users to compare non-memo field entries in two tables. Casetext converts the case text entries (i.e. upper, lower, first word upper or individually for specific words defined in a dictionary [i.e. O'Leary]).</p> <p>3) Lensegrav tutored WDFW's Laurie Peterson on how to use ArcView and access the SDE coverages. To assist future users, he also improved the instructions.</p>

- 4) Sikora called Cedric Cooney, Bart Butterfield and Stephen Pastor to confirm for Mike Banach that they were in agreement with the minor changes that were discussed by email after hat-format4 was distributed. In the March SC meeting, all SC members approved Banach's 2/26/2001 version with two caveats (some BegFt references needed to be fixed and the coordination requirements needed re-wording). Banach delivered the revised DEF late in April and changed the WBID coding convention for OutflowTypeID from centroid of the marine water body to always Pacific Ocean. This issue must be discussed.
- 5) Sikora relayed the history of StreamNet's RetToStream field conventions for Mike Banach and the other state's StreamNet staff.
- 6) Woodard worked more on designing the separate internal WDFW hatchery returns and escapement database but he awaits a file from Sikora before he finalizes the escapement database.

WDFW	2 Update existing data sets as described in Task 1 and provide data to the regional StreamNet office in Data Exchange Format (DEF). Provide data as subsets are updated, rather than waiting for entire data set to be complete.	See Obj 1 Task 1.b Comp 1 for issues Kinney found with the oct/dec2000 exchange of returns data. We didn't re-exchange a file and Kinney just fixed the entries.
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Objective 2 Data Management and Delivery

Task 2. Data Plan

Update and maintain a project data plan that identifies 1) current data holdings at the regional level, 2) data items to be incorporated in the current contract period and in future years, and 3) expectations for data development and delivery from participating organizations within the current contract period

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Provide input to the data plan to keep it responsive to subbasin planning and Framework needs and schedules.	Kept Steering Committee apprised of regional discussions, issues and developments concerning subbasin planning. While discussions are sometimes intense, regional consensus on an approach to subbasin planning is slow to achieve. Key data needs are fairly unchanging during these discussions, however, and these were provided to the Steering Committee.
ODFW	1 Work jointly with other participants to modify elements of data plan or priorities based on needs arising out of sub-basin planning or other processes that drive Basin data needs through the amended Fish & Wildlife Program.	Modified one staff member's work plan to include responding to a data request for hatchery mass-marking information.

Task 3. Data Exchange Standards

Establish and maintain data exchange standards that ensure consistent format and content of data that originated from the multiple agencies and data sources in the basin. Included will be proposed and adopted data exchange formats, metadata and location look-up tables for specific data items as described under Objective 1. At the regional level, this task will provide technical assistance regarding standard codes and exchange formats for Fish and Wildlife Program and ESA- related projects, and for applicable tribal data compilation activities. At the state level, this task will provide similar technical assistance for state agency data activities applicable to StreamNet.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRIFC	1 Participate in the design, development and maintenance of standard codes and data exchange formats. This will occur through involvement on the Steering Committee and technical work groups.	Reviewed DEF issues as they were presented to the Steering Committee. Assist ODFW and StreamNet staff with database problems.
IDFG	1 Participate in the design, development and maintenance of standard codes and data exchange formats. This will occur through involvement on the Steering Committee and technical work groups. There is no set schedule for this task, because it is highly dependent on issues facing the Steering Committee. Potential new data exchange standards may include juvenile abundance, genetics, stream habitat, stream temperature and resident fish releases.	Provided review, input and approval of new data exchange formats, including 2001.1 and fish distribution.
MFWP	1 MFWP StreamNet will participate in the design, development and maintenance of standard codes and data exchange formats through involvement on the Steering Committee and technical work groups.	Ongoing. Will finalize 4th quarter.
ODFW	1 Participate in the design, development and maintenance of standard codes and data exchange formats. This will occur through involvement on the Steering Committee and technical work groups. There is no set schedule for this task, because it is highly dependent on issues facing the Steering Committee. Potential new data exchange standards may include juvenile abundance, genetics, stream habitat, stream temperature and resident fish releases.	1) One staff member was assigned to a three-person work group to find duplicate references in the StreamNet library system. Work is still in progress. 2) Provided comment on whether or not we should keep RRN in the StreamNet exchange format. The consensus in Oregon was as long as data that is currently web accessible is not impacted, and there are no NHD issues, Oregon has not problem with removing RRNs.
WDFW	1 Compile and review the specific criteria used by participating agencies in describing fish distribution, use, or extent information, in order to find and adopt common standards among data providers.	O'Connor participated in some initial comparative discussions of fish distribution and use criteria that go beyond the current StreamNet standards for anadromous fish (specifically using WDFW/USFWS criteria developed in 2000 for bull trout). Integrating these with Montana's parallel but distinctive approach to describing resident species will be a complex challenge that hasn't progressed beyond the share-and-compare stage at this point (see 1.2a.1).

WDFW	2 Analyze Hatchery Returns exchange format and explore whether a second table (covering Spawning and Disposition data fields) is needed to more accurately meet the needs of the Artificial Production Committee.	Additional Steering Committee member comments on the draft hatchery returns format were sent in to O'Connor. The task of compiling these into a revised and broadened format proposal has been shifted to Q3 due to competing priorities.
WDFW	4 Move toward complete adoption of LLIDs as the standard stream referencing code by reviewing and completing the RRN-to-LLID conversion, addressing supercode issues, and assuring that LLIDs are assigned to all locations where StreamNet data exist.	<p>1) In February, Lensegrav finished assigning StreamNet location codes to the simple PSC codes (using files Supercode.db, 1gil-redo-some-LLIDXPSC &more.db, 3wdfw-supercodelocs.db and 3wdfw-Supercode). That work followed with research of the complex PSC codes covering several rivers. Lensegrav compared the rivers included in each complex PSC code against the rivers included in a relevant HUC or WRIA (using and updating file research-big-superids.db). In March, Lensegrav finished building a table to assign supercodes to group PSC codes that couldn't be mapped by HUCs or WRIAs (file groupXindivpsc.db).</p> <p>2) O'Connor generated a document describing the process of assigning "site-Ids" to Washington marine areas. The procedure involved generated a LongLat value from the centroid of the polygon formed by each commercial and sport salmon area in Puget Sound, the Straits, Grays Harbor, Willapa Bay, and the Washington Coast. These will be used to address (and replace) the marine "supercodes" previously assigned to trends from Washington marine areas.</p> <p>3) Sikora also had Lensegrav start a small step (building a table with records for each county touched by WDW's Snum codes) in an effort to globally assign county codes to the Walocs file. To date, WDFW's Brodie Cox can't completely answer release data requests based on counties. After we started this first step, Sikora discovered only a few Walocs records need county codes and she must renew discussion with Brodie Cox about the true extent of the need and the best approach to adopt.</p>
WDFW	5 Provide metadata for tabular and spatial datasets according to guidelines adopted by the Steering Committee.	When tabular data is exchanged, Sikora submits the relevant metaform.doc. No exchanges occurred during this period.
WDFW	6 Construct a new data compilation and conversion system to provide data in MS Access according to the most recently adopted exchange format version. Begin exchanging data in MS Access form by winter, 2001.	See Obj 2 Task 1 Work Element 1 for details.

Task 4. GIS Data System

Establish and implement procedures for coordination of StreamNet-related spatial data activities among participating organizations, to include regular meetings and or other communication links among participating GIS specialists. Designate and maintain metadata format for spatial data to be used by StreamNet participants. Prepare map products in hardcopy and/or electronic format for use in Program-related aquatic resource policy, planning, and management. Provide for distribution of spatial data in GIS and tabular format and as GIS products.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Maintain and enhance a geographic information system (GIS) related to regional and state-level StreamNet goals and objectives.	1) Moved our core GIS layer to a new file server, purchased by IDFG. This allows greater access to GIS data by IDFG staff. 2) Developed a custom ArcView application for filling species list data requests. This increases our speed and accuracy in filling information requests.
IDFG	2 Prepare data and map products from StreamNet data on request	Responded to 10 requests for GIS data, mostly for fish distribution layers.
MFWP	1 Maintain a state- level GIS program (state and StreamNet funded)	Surplused one Unix box to BPA; the other to State of Montana. Received 1.75 permanent FTE from legislature for GIS MFWP program for FY02. FTE will be split among ISU staff that is also responsible for StreamNet. Had temporary FTE for the last two years.
MFWP	2 Prepare map products in hardcopy and/or electronic format for use in Program-related aquatic resource policy, planning, and management.	Filled 21 Fisheries related GIS map and data requests during the quarter.
ODFW	1 Participate in planning and coordination meetings for state-level 24k hydrography layer to ensure compatibility with the StreamNet's adopted hydrography.	Updated metadata for primary anadromous salmonid distribution data layers.
ODFW	2 Maintain and enhance a geographic information system (GIS) related to regional StreamNet goals and objectives (general maintenance, metadata development and maintenance, planning and coordination activities, etc.).	1) Reviewed Oregon Natural Heritage Program's latest list of T&E species designations which highlighted that fact that some of our state ESA coding in the distribution data needs to be updated. 2) Various system admin related tasks including ArcView upgrade, resolving disk partition / space constraint issues and backup scripts. Successfully loaded the Oregon Dept. of Forestry's Image locator extension to ArcView. This extension allows the user to create an index to the DRG's and then with the "image tool" the user can click anywhere on the view and that DRG will load into the view. This will save immense amounts of time when compared to the process of loading DRG images manually and should be useful in future distribution development efforts. 3) Modified Event Editor tools to facilitate update of Bull Trout event data in StreamNet format.

ODFW	3 Prepare spatial data and map products in hardcopy and/or electronic format for use in Program-related aquatic resource policy, planning, and management.	Provided feedback on the online habitat restoration data.
Region	1 Maintain and enhance a geographic information system (GIS) related to regional StreamNet goals and objectives.	<p>1) Changed computers and re-installed and configured GIS software completely on primary and secondary computers. This was done to increase computing speed, and was made possible by replacement of the database server freeing up one computer that had been held as backup for the server with the bad hard drive in its RAID system.</p> <p>2) Revised the StreamNet lakes GIS layer to include updated information from WDFW. Posted this GIS layer, along with updated documentation, to the StreamNet web site for download.</p>
Region	2 Prepare GIS data and map products from StreamNet data.	Prepared GIS data and map products from StreamNet data, as needed. Responded to all requests from the public and prepared GIS data, maps, and other products for 38 public requests. Requests were from a variety of sources including private citizens, environmental consulting firms, government agencies, educators, and students. Prepared more detailed map products for requests from the NWPPC and associates for use in reports, etc. Examples included the design of a database application to trace and summarize the downstream stream path to the ocean of hatchery releases from virtually any location in the Pacific Northwest and a trio of maps of select watersheds in Southwest Washington.
Region	3 Integrate the functioning of the GIS system with the StreamNet fisheries and habitat database, in support of the query system. Create cross tables and queryable maps used via the StreamNet web interface.	<p>1) Determined and added improved tributary flow information to stream information in the database.</p> <p>2) Continued to improve and refine cross tables where errors were found.</p> <p>3) Determined complete cross tables for new Montana hydrography, intersecting the new stream layer by county, subbasin, region, and watershed (HUC), and adding this information to the database to make Montana data queryable. Revised this information for the updated Idaho hydrography but did not add this information to the database pending upcoming data submissions from IDFG.</p>
Region	4 Direct users to other GIS resources when requests exceed StreamNet capability	Directed users to other GIS resources when requests exceeded StreamNet capability.
WDFW	1 Create approved reference documents for all exchanged spatial	Didn't add this back from budget cut until Q3 but see Obj 3 Task 1 Comp 1. data sets. (See also Task 2.3, work component 5)

Task 5 StreamNet Internet Site

Continue to maintain and enhance the existing client-server system to provide access to StreamNet data products through the Internet. The StreamNet home page will continue to be recognized as the project's primary data delivery vehicle. Priority will be given to incorporating data developed through Objective 1 and providing access to reference materials secured through Objective 3. Appropriate training on the use of the system will be provided through a combination of on-line help and in-person training sessions.

SubTask 5.a Maintain the StreamNet Client Server system

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
Region	1 Maintain, upgrade as needed, and administer the StreamNet web servers.	An increasing amount of daily maintenance and frequent restarts were necessary to keep the StreamNet web server up and running.

SubTask 5.b Enhance and improve the StreamNet website

Maintain and enhance components of the StreamNet home page and incorporate new features that complement existing components

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Work with subbasin planners to identify modifications and new uses which will make the website more useful to them	Library staff worked on scanning the 1990 subbasin plans. They were added to the Library web pages on Subbasin planning.
CRITFC	2 Identify changes and new features which will improve delivery of Library services	Web page went live with access to the electronic catalog and began adding PDF files to the Subbasin planning section. Began using Ariel document transmission/receipt software to enable faster receipt of journal article interlibrary loans.
CRITFC	3 Work with regional staff to implement changes identified above.	Began talking to Karen McGill about web site design and coordination of library web site with Project web site.
IDFG	1 Recommend and/or take part in review of new products and features. Provide feedback on content, suitability, navigability and data currency issues.	Provided feedback during Steering Committee meetings on new website.
ODFW	1 Recommend and/or take part in review of new products and features. Provide feedback on content, suitability, navigability and data currency issues.	1) Investigated differences between ArcView 8 and Arc Info 8. 2) Developed survey to query users of the salmonid distribution data to better understand how they are using the data and how we may be able to improve upon it to meet their needs.

Region	1 Summarize results from the StreamNet online user survey. Compile a list of recommended changes and improvements to the online data system	<p>1) Due to a persistent problem that was not quickly overcome, an alternative query site was created on a server in Boise, Idaho, for those users who were unable to use the regular StreamNet query system. This system was installed, debugged, and linked to for several weeks. The problem that necessitated this alternate query site was subsequently identified and corrected, and the alternate query site was taken down after we were certain the original problem had been fixed.</p> <p>2) The StreamNet query system was updated and had errors fixed. These error fixes and enhancements were tested and then ported to the production web site.</p> <p>3) Several corrections were made to the Glossary in the Fish Facts section of the web site. The wording was improved on a number of pages on the site.</p>
Region	3 Plan to enhance the website content by adding additional kinds of information that will support the Fish and Wildlife Program. Develop concept for increasing information by coordinating with regional data users	During a Power Planning Council meeting the Council requested that, to the degree possible within existing project scope and support, we should attempt to begin acquisition and public posting of more data related to resident fish species. Staff discussions were held to determine how best to approach that request. We determined that we will begin to contact sponsors of resident fish projects funded by BPA to locate resident fish data. For any data that fit current data categories, we will work with sponsors to acquire the data for inclusion in the StreamNet database. For other data, we can obtain electronic data sets and make them available as 'Independent Data Sets' and post them in an archive in whatever form they currently exist.
WDFW	1 Take part in review of new products and features. Provide feedback on content, suitability, navigability and data currency issues, especially issues related to providing static or dynamic map capabilities.	O'Connor compiled comments on the draft StreamNet Online User's Guide from six WDFW staff and sent them to Bruce Schmidt.

Objective 2 Data Management and Delivery

Task 6. 1:100,000-scale Hydrography

Maintain the 1:100,000-scale PNW hydrography for purposes of attaching StreamNet data. Coordinate with efforts to prepare a National Hydrographic Dataset (NHD). Develop a standardized method for incorporating lake hydrography and attribute information.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	1 Maintain the Idaho portion of the 1:100,000-scale PNW hydrography for purposes of attaching StreamNet data.	Identified needed new routes and some corrections to make. Changes not yet made.

IDFG	2 Participate in coordination of the National Hydrographic Dataset (NHD).	Provided feedback to other state agencies regarding relations of PNW river reach files and NHD. Also provided feedback on development of 24k hydrography layer for Idaho.
MFWP	1 Support the efforts of the NHD and convert Montana hydrography to NHD upon receipt.	Coordinated with NRIS on work to convert Montana hydrography to NHD; assigned tasks and began work.
MFWP	2 Enhance layer with LLID and stream level routing.	Completed assignment of LLID and stream level routing for western Montana. Converted MRIS data to routed hydrography for western Montana. Regional StreamNet staff assisted in the process of assigning LLID and other quality checking.
MFWP	3 Coordinate with NRIS in the QA/QC of the NHD for Montana including the development of a lakes layer (funding provided by the BOR for lakes).	NRIS staff began QA/QC of NHD files. StreamNet staff assisted by building ArcView interface to help with the QA/QC.
ODFW	3 Provide technical advice on hydrology routing and other issues including those related to working with higher resolution hydrography.	Provided technical support to ODFW staff working with routed hydrography.
Region	1 Continue to maintain the regional 1:100,000-scale PNW hydrography.	Routine maintenance and management of the hydrography continued.
Region	2 Implement updates to the 1:100,000-scale PNW hydrography from state cooperators.	1) Completed review of updated IDFG hydrography, reconciling all border issues between other state hydro sets. 2) QA'd Montana hydrography and finalized this data set in coordination with MFWP StreamNet component. Reformatted this final Montana Hydrography data set to match PNW Reach file format.
Region	3 Update and serve a regional web version of the 1:100,000-scale PNW hydrographic set from the StreamNet website.	Corrected file errors in some of the hydrographic files and updated the corrected files to the StreamNet website.
WDFW	1 Complete Steering Committee discussion about lake attributes useful to share in a regional database; determine support for a new data format.	See Obj 2 Task 6 Work Element 2.
WDFW	2 Compile, standardize, and exchange point, line, and polygon information for lakes stocked with fish that appear at 100K (or higher) resolution.	1) To coordinate StreamNet's lake layer with the WaterBodyIDs used in returns data, Hudson sent David Graves a copy of WDFW's Lake layer just before we renamed the misnomer LLID field to WBID (waterbodyID). Sikora warned Graves of the change and confirmed that our internal tabular file that is used to assign codes for the returns data does coincide with that spatial layer.

2) In January, Bob Huxford demonstrated for O'Connor, Sikora and Lensegrav the independent GIS layer in his commercial Lakes of Washington product. Lensegrav reviewed Huxford's product further and we will buy at least a few copies when it is ready for sale. Sikora and Lensegrav responded to a few request for lake bathymetric (topo) maps. Sikora discovered that old Washington Department of Wildlife publications (several publications titled as ...High Lake Surveys...) are a source of lake topo maps. Lensegrav compared the SW Washington high lakes surveys against a requestors Washington lakes website and found both are good resources for common and unique lake topo maps. In February and March, Sikora identified 18 WBID codes that are also used as LLID codes. Coincidentally, 32 different hatchery facility site codes (concatenated longitudes and latitudes) are also used as LLIDs. O'Connor's research revealed that DOE adopted WBIDs that are sometimes far from the centroid of the lake. He raised concerns with DOE about their process for assigning WBIDs. We've yet to learn the scope of the issue or to interest DOE in our concerns - further research is needed.

3) Sikora researched and sent WDFW's Stacie Kelsie historical information about lake sections that are reported as greater than 36.

4) Sikora sent Bob Pfeifer of Parametrix a copy of our lake layer shape files and began her first effort to compare the Lakes.dbf shape file against the statlake.dbf that is dumped from Hudson's spatial interface. Lensegrav helped organize all available information by building lake-fields.db to show all fields common or unique to each lake related source.

Objective 2 Data Management and Delivery

Task 7. Data Requests

Receive and respond to requests for data, source materials, and custom products. 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.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 See Tasks 1.1h, 1.6, and Objective 3	Answered requests for materials as in Objective 3. Further discussions with Drew Parkin made clear that the development of bibliographies was not going to be fiscally feasible.
IDFG	1 Continue to respond to requests for information from StreamNet database, including requests for fishery information that comes into the Idaho Conservation Data Center (Natural Heritage Program), other IDFG programs and personnel, and outside agencies and consultants.	Completed 44 requests for location specific fish species list and other data requests.

MFWP	1 Receive and respond to requests for data, source materials, and custom products. Respond to requests within the limits of available resources, with priority given to information requests having direct relevance to the FWP.	Supported FWP Fisheries Division Native Species Management, Westslope Cutthroat Trout Priority Areas and Yellowstone Cutthroat Trout Data Collection.
ODFW	1 As requested, consistent with other deliverables in this contract, receive and respond to requests for data, source materials, technical training, and custom products.	A total of 9 data, 76 document, 3 map, and 10 'other' requests were answered during this quarter. A detailed list by requester and request type can be made available upon request. The number of data downloads from the ODFW FTP site is not available for this quarter.
Region	1 Respond within one day whenever possible to all user requests received via email, phone, or other medium. Typical requests received include help using the query system, complex data requests not easily done with the query system, and requests for GIS coverages and maps.	Responded to over 80 requests for data, GIS assistance, or general information.
Region	2 Fill requests for data not available via the web in an expeditious manner, with highest priority for people working for the NPPC's Fish and Wildlife Program. Requests from outside the Fish and Wildlife Program or participating agencies will be addressed on an 'as possible' basis.	1) We received a request from NWPPC late in the quarter for mass adipose fin clipping data. This request will be addressed in the third quarter. 2) We obtained funding this quarter for special assistance in gathering subbasin planning data. This work will be conducted in the third quarter.
WDFW	1 Generate maps, data reports, and electronic copies of datasets as requested.	Didn't add this back from budget cut until Q3 but continued answering data requests. Important data requests are reported under the task number pertinent to each dataset because requests often reveal data issues or inspire different compiling approaches. Upon request, the details for each data request is also available from a detailed tracking file (internally stored on WDFW's server at S:\Fish\Groups\BDS\Streamnt\Requests\Datareq.db). Overall, WDFW StreamNet staff provided anadromous and resident fish release information, salmonid escapement estimates, barriers data, and over 250 maps and 12 digital GIS coverages featuring fish distribution/use and hydro layer data to clients representing USFS, Eastern Washington University, Snohomish County, CRITFC, WDFW, the Washington Environmental Council, and various private citizens.
WDFW	2 Provide PRIORITY data support for subbasin assessments and other new elements of the NWPPC Fish & Wildlife Program.	O'Connor and staff member Brodie Cox provided detailed Yakima Basin resident and anadromous fish stocking data as well as several maps in support of the Columbia Plateau Province's data review as part of the Council's Rolling Review process. O'Connor attended the data review and responded to fish data and GIS questions.

Objective 3 Library / Reference Services

Provide a full service regional library for fish (and to some degree wildlife) literature (published and gray), including documentation of all data in the StreamNet database.

Objective 3 Library / Reference Services

Task 1. Collection Development

Develop a collection of materials applicable to the mission of StreamNet. Collect, catalog and organize materials to document data source materials, Fish and Wildlife Program activities and reports, and other gray literature for access by regional scientists, agencies, interested parties, and other libraries.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Coordinate source material submissions for data compiled under Objective 1. Develop standards for document submissions	Received and cataloged submissions from Project members.
CRITFC	2 Collect and catalog documents prepared by contractors (including final products published by BPA and draft documents suitable for public release) under the Fish and Wildlife Program. Work with Publications distribution for better publication notification and deposit system.	Continued project of filling in gaps in runs of annual reports from various projects. Identified need for tracking a particular bit of information in regard to BPA publication and contracts.
CRITFC	3 Collect and catalog documents from the Council's Fish and Wildlife Program-related collection.	Completed cataloging the books in the NPPC Fish and Wildlife Program collection. Began working on new documents received that include memos, notices and other internal documentation.
CRITFC	4 Collect and catalog additional books, journals, agency reports, gray literature, research reports, and documents that are applicable to management of the region's aquatic resources.	583 records were added to the online catalog. These include new materials, as well as older, donated materials.
MFWP	1 Provide an update to the electronic version of documents used as source materials for data compiled in Objective 1.	Sent CD to StreamNet library. Fisheries Division staff continued to maintain library. StreamNet staff worked with contractor who enters records to add species lookup and LLID lookup. Began assigning library reference to species level data in MRIS.
ODFW	1 Provide originals/copies of all documents and reports referenced in the compilation of new StreamNet data holdings, but not already housed in the StreamNet Library.	1) Drafted and submitted reference memos and the associated metadata for two dynamic databases related to Oregon DistPres data. 2) Spent time cataloging all new references related to abundance trends for a future library submission.
ODFW	2 Update the set of historic (pre-1975) Oregon Fish Commission and Game Commission reports and provide to the StreamNet Library as available.	This task was dropped due to budget cuts and the fact that the StreamNet Library is running out of physical space to hold new materials not linked to StreamNet trends.

ODFW	3 Update library bibliography of ODFW, Fish Commission, and Game Commission reports with historic and current publications and make the bibliography available for reference via StreamNet and ODFW websites.	Continued to perform numerous maintenance, update and correction activities to the InMagic bibliography, however the bibliography is not yet ready for online access because there is no database manager on staff to perform the necessary tasks.
WDFW	1 WDFW StreamNet will continue to collect documents used as source materials for data in Objectives 1 and 2. Documents will be assigned reference numbers and forwarded to the StreamNet library as per established SN guidelines.	<p>1) Sikora compared Oregon's reference records with the July 2000 StreamNet mdb to identify the differences against StreamNet's reference table and found no alarming differences. ODFW data has few differences because they adopted the StreamNet entries about a year ago. Because of the Feb 28 earthquake, Sikora couldn't produce a printed report for the March SC meeting. But she started discussion on how the reference record data flows with hopes to reveal how the differences occurred for WDFW records. At the outset of the discussion, greater issues were revealed on how to assign a RefID. Collectively the designated team (Ofstedahl, Shannon and Sikora) must resolve conventions for RefID assignment before we discuss reference record data flow issues. We're waiting for Ofstedahl's report on all publications that have more than one RefID.</p> <p>2) In February, using the Fish Distribution spatial data reference assignment, Sikora began training Burns on how to manage, scope, and document data files and issues.</p>

Objective 3 Library / Reference Services

Task 2. Provide Access to Collection

Provide user access to the materials described in Task 3.1 by providing facilities for storage of paper and electronic copies of documents, an online catalog of all documents in collections, and staff to answer location questions and respond to requests.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Maintain an appropriate facility for the storage and public use of the physical collection.	Space for collection maintained. Began discussions with CRITFC operations staff about expansion and library growth.
CRITFC	2 Catalog, organize and maintain the collection for appropriate on-site use.	<p>1) Continued cataloging materials.</p> <p>2) Worked on space planning issues with regard to rapidly expanding periodical collection.</p>
CRITFC	3 Provide access to the StreamNet Library Catalog.	Access to the StreamNet Library catalog was added to the web page.
CRITFC	4 Develop a schedule for regular updates of the reference table.	Continue working with staff on reference table updates and what is still necessary now that the reference table is no longer acting as our web access catalog.

ODFW	1 Enhance, maintain, and update ODFW Library software and procedures to ensure adequate tracking of information requests, key word searches, and easy comparison to the StreamNet Library holdings.	No effort was made this quarter - no database manager on staff.
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Objective 3 Library / Reference Services

Task 3. Improve Electronic Access

Enhance the online capabilities of the StreamNet Library, including catalog access via the internet and an electronic archive of key Columbia Basin documents.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Manage and maintain the Library catalog server	Server received from CRITFC technical support. Set up library web page and settled DNS entry problems.
CRITFC	2 Integrate the library catalogs into a single web application using TextWorks Web Publisher	Received updated catalog from Montana. Began trying to import catalog into the Library catalog.
CRITFC	3 Develop an electronic archive of key Columbia Basin documents	Continued digitizing the 1990 subbasin plans.
CRITFC	4 Make electronic documents available through the Library web page.	Library web0pages working. Electronic documents are being added.

Objective 3 Library / Reference Services

Task 4. Library Services

Manage the StreamNet Library and provide library services to the StreamNet user community and the general public.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Provide access guide to outline services for patrons.	Added the access guide to the library web site as a page titled Services.
CRITFC	2 Assist users to locate information by providing reference, referral, and computer based search services.	1) Answered approximately 346 requests for information. 2) In addition to the directional requests that are not counted, we received several email requests for information from the library website.
CRITFC	3 Provide document delivery services, including inter-library lending and borrowing.	1) We lent 26 books to other libraries. 2) We provided materials to distant clients in Enterprise, OR; Pendleton, OR; and other locations.
CRITFC	4 Maintain hardcopy files of draft and final documents related to the NPPC amendment process, subbasin planning, and Columbia River/Portland harbor dredging	1) Continued to archive electronic files on the Library server. 2) Continued to identify which documents should be printed for paper archives.
ODFW	1 Respond to requests for ODFW documents and other source materials.	Provided 209 hardcopy documents and 5 electronic documents to 64 individual users during the quarter.

Objective 3 Library / Reference Services

Task 5. Inter-library Coordination

Engage in networking activities 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

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Collect information about other regional fish and wildlife library collections and access policies.	Continued efforts at locating fish and wildlife libraries in the region.
CRITFC	2 Provide consultations for agencies and groups on ways to coordinate catalogs and services.	Visited WDFW-Vancouver office to assist with library development.
CRITFC	3 Coordinate with users, agencies, and regional libraries to improve services and avoid unnecessary duplication. Perform a needs assessment for the Library.	1) Needs assessment was completed. Returns were minimal, so there wasn't much to analyze. 2) Continued to update records of library periodical holdings.
CRITFC	5 Maintain presence in related Library groups (i.e. IAMSLIC, NRIC) to provide access to knowledge on Best Management Practices for libraries and current awareness of subject-related materials.	1) Renewed membership in SLA, include the Oregon Chapter and Environmental Resources Management Division. 2) Attended annual Cyamus (IAMSLIC west coast chapter) in Monterey.
ODFW	1 Coordinate with the Oregon State Library system to enhance access to published periodicals, journals, and other documents for StreamNet users.	1) Processed 24 Inter-Library Loans for the sturgeon project through the Oregon State Library. 2) Attended open house at State Library and met with the State Librarian regarding library issues.

Objective 4 Services to Fish and Wildlife Program Activities

Provide technical data services to Fish and Wildlife Program decision-makers and appropriate Fish and Wildlife Program projects

Objective 4 Services to Fish and Wildlife

Task 1 Monitoring and Evaluation

Assist in the development of products that contribute to the monitoring and evaluating (M&E) of Fish and Wildlife Program effectiveness. Specific area of involvement will include:

Objective 4 Services to Fish and Wildlife Task 1 Monitoring and Evaluation

SubTask 1.a M&E Participation

Participate in Program-related monitoring and evaluation work groups

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Assist basin wide efforts to develop an R/M/E plan consistent with the regional Framework	No work this quarter. This has been an inactive issue, regionally, since CBFWA and the NWPPC staffs completed their reports last year. It is expected to be actively discussed again as subbasin planning efforts begin.

IDFG	1 Participate in discussions concerning data needs to support processes adopted by the amended Fish & Wildlife Program for Monitoring and Evaluation.	Participated in discussions at Steering Committee meetings.
MFWP	1 Participate in discussions concerning data needs to support processes adopted by the amended Fish & Wildlife Program for Monitoring and Evaluation.	Discussed at SC meeting; had to attend via conference call.
ODFW	1 Participate in discussions concerning data needs to support processes adopted by the amended Fish & Wildlife Program for Monitoring and Evaluation.	Reviewed NMFS's data needs as related to the Viable Salmon Population analysis and the Regional Data Management Committee's papers related to data management needs in the basin.

Objective 4 Services to Fish and Wildlife Task 1 Monitoring and Evaluation

Task 1.b Evaluation

Periodically re-evaluate the StreamNet data plan to ensure consistency with M&E needs

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Keep Steering Committee apprised of regional R/M/E plans and needs	Presentations are made regularly to the Steering Committee when new information or action occurs at the regional level.
ODFW	1 Participate in discussions concerning the StreamNet data plan to ensure it supports processes adopted by the amended Fish & Wildlife Program for Monitoring and Evaluation.	Received and reviewed Gustavo Bisbal's "Conceptual design of monitoring and evaluation plans for fish and wildlife in the Columbia River ecosystem" document.
Region	1 Keep abreast of regional data needs related to Fish and Wildlife Program Monitoring and Evaluation and plan for StreamNet database's ability to fulfill these needs.	In response to a request from NMFS, we prepared an inventory of redd count data in the StreamNet database to make it easier for them to locate data needed to evaluate salmon viability.

Objective 4 Services to Fish and Wildlife Task 1 Monitoring and Evaluation

Task 1.c M & E Reporting

Prepare reports and data products that illustrate key M&E topics

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	1 No work planned but we are willing to adjust work plans to address amended Fish and Wildlife Program needs.	This task was dropped due to budget cuts.

Objective 4 Services to Fish and Wildlife

Task 2. Watershed Projects

Provide data and data services to Fish and Wildlife Program-sponsored watershed planning and assessment projects

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Assist subbasin planners to develop monitoring and evaluation activities for watershed projects that will integrate smoothly with StreamNet databases (cost sharing)	Subbasin planning activities have yet to begin. No activity this quarter.
MFWP	1 Participate in watershed and, sub-basin planning to the extent requested by the Council and other regional participants. Coordinate with Montana CBFWA representatives in the process and assure a valuable product. Volunteer to complete a pilot sub-basin in the process within Montana.	No requests for participation were received.

Objective 4 Services to Fish and Wildlife

Task 3. Stock Assessment Projects

Provide technical assistance to the Upper Columbia Basin and Upper Snake River Basin resident fish stock assessment projects, including a) identification of regionally consistent data exchange standards and b) Internet access to project data and other information. Specific actions will be defined in consultation with stock assessment project managers

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
ODFW	1 Provide assistance as needed.	This task was dropped due to budget cuts.

Objective 4 Services to Fish and Wildlife

Task 4. Service to Other Fish and Wildlife Program Projects and Activities

In consultation with CBFWA, the Council, and BPA StreamNet will provide technical assistance and data services to select Program projects

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Collaborate with CBFWA, NPPC, and other fish and wildlife programs in the Columbia Basin to identify and provide technical and other services to the Fish and Wildlife Program	Discussed possible StreamNet services with NWPPC and NMFS staffs. No specific services were identified due to the slow progress of subbasin planning discussions.
IDFG	1 Provide technical and other services to other FWP projects occurring in IDFG.	Coordinated with Idaho Supplementation Studies project personnel to enhance their data management needs and facilitate the flow of data to StreamNet. Included development of a juvenile trapping operations database and adult redd count database.

ODFW	1 Provide technical assistance and data services to F&W Program projects as needed and adjust work plan priorities accordingly.	In response to a request from the NWPPC (through Regional StreamNet), scoped the effort it would take to compile tagged and untagged hatchery release data for 1999 and 2000 and planned releases for 2001.
ODFW	2 Produce pre- and post-season harvest and stock status reports for Columbia River fish runs and fisheries and make reports available via either via the StreamNet site directly or via the ODFW Columbia River Management site with a link from StreamNet.	Continued progress on reformatting State Report and Recreational Fisheries report for inclusion in the web site
ODFW	3 Draft a summary of real-time data services that can be provided as well as a description of how these services differ from current data services provided in the Basin.	Began work on reorganizing current web site to better incorporate real-time data.
Region	1 Work with Fish and Wildlife Program projects throughout the basin to assist with providing information needed by the projects and acquiring and distributing information generated by the projects.	NPPC requested data on mass marking of salmon for selective fisheries. We requested and received clarification on what data were needed. The requested information was found to not be readily available in any regional database and would have to be put together by the state StreamNet projects. We agreed to take on the request during the next quarter.

Objective 4 Services to Fish and Wildlife

Task 5. Protected Areas

StreamNet will a) maintain and provide access to the Council's Protected Areas dataset, b) archive the official version as a historic record, and c) in consultation with the Council, respond to requests for information concerning Protected Areas

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
Region	1 Maintain the existing Protected Areas database.	Ongoing

Objective 4 Services to Fish and Wildlife

Task 6 Basin Data Needs

StreamNet will provide information and assistance to regional reviews of data management projects and data management needs conducted by the PPC, ISRP, ISAB and other regional entities

Objective 4 Services to Fish and Wildlife Task 6 Basin Data Needs

SubTask 6.a Data Management Needs

Work with regional entities to develop an analysis of regional data management needs, challenges and capabilities

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Participate on Council advisory committees to identify data needs and data gaps	RAAC committee agreed on key data and analyses needed to validate the EDT method of subbasin assessment. These data needs and activities were reported to the Steering Committee.

MFWP	1 Provide review of any and all regional data management issues	Attended StreamNet Steering Committee meeting where this topic was discussed.
ODFW	1 Assist as needed with identifying data needs of the amended Fish and Wildlife Program	Reviewed and commented on a few drafts of a project proposal to compile all fish related data in the Willamette Basin to support and populate NMFS's Viable Salmon Population analysis.
Region	1 Encourage and work with regional entities to respond to the recommendations made by the ISRP database project review. Assist with efforts to standardize data collection methods and develop regional data priorities.	No specific actions have come out of the ISRP review. During the quarter we participated in a Regional Data Management Committee meeting in hopes of contributing to a regional discussion of information management needs and approaches. No specific actions were taken pending agreement on committee organization and direction between the Council and NMFS.
WDFW	1 Participate in regional discussions of data needs and data management strategies in support of the newly amended Fish and Wildlife Program.	1) O'Connor briefly reviewed the historic fish distribution database for Washington state compiled by The Nature Conservancy and advised that StreamNet provide a link to the TNC site for data access, rather than trying to incorporate these data into the current StreamNet distribution dataset. 2) O'Connor responded to several requests from NPPC consultant Drew Parkin, including providing copies of SaSI stock status documents and stock delineation definitions, providing follow-up comments on his assessment of subbasin GIS activities, and attending a Washington coordination meeting in Olympia with staff from the EDT Project, NPPC, NMFS, and Washington's Salmon/Watershed Information Manager, to describe the StreamNet and WDFW contributions to these efforts. 3) O'Connor participated in a conference call to discuss progress and futures of the Regional Data Management Committee, an effort co-led by NMFS and the NPPC.

Objective 4 Services to Fish and Wildlife Task 6 Basin Data Needs

SubTask 6.b Data Needs Workshop

Promote organization of a regional 'data needs workshop' to establish regional data / information needs and priorities and to develop recommendations for roles and responsibilities for acquiring and providing the needed data / information

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
All		No effort was directed toward this subtask this quarter.

Objective 5 Project Management / Coordination

Provide effective leadership that ensures the production of high quality products targeted at critical applications and the development of these products in a timely, cost-effective manner.

Objective 5 Project Management / Coordination

Task 1. Manage Project Activities

Administer all aspects of the project at the regional and sub-contractor levels, including oversight of budget, personnel, work statement preparation and implementation, coordination among participating agencies, active participation in steering committee work, and project reporting

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Provide normal supervision of StreamNet Library staff and the CRITFC database Programmer.	Normal supervision of staff was provided as required.
CRITFC	2 Produce quarterly reports within 1 month after the end of each Quarter	Report was delayed.
CRITFC	4 Participate in Steering Committee meetings	One Steering Committee meeting was attended this quarter.
CRITFC	5 Collaborate on developing a final detailed Statement of Work for the current contract and for the coming year	Adjusted CRITFC budget to restore some of the funds cut by the Council.
FWS	1 Represent FWS in Steering Committee meetings	Attended March Steering Committee meeting in Olympia
FWS	2 Produce quarterly reports w/in 30 days of quarter end	Submitted Q1 activity report
IDFG	1 Participate in Steering Committee activities. Manage all aspects of StreamNet in IDFG, including budget, personnel, and work management. Products will include: Annual IDFG StreamNet work statement; Quarterly and annual reports of progress; and, Participation in Steering Committee activities.	Conducted all parts of StreamNet management for IDFG, including progress reports, budget management, work management, and supervision.
MFWP	1 Administer all aspects of the project for Montana, including oversight of budget, personnel, work statement preparation and implementation, coordination, and project reporting. Participate in Steering Committee.	Received additional funding for FY01. Did necessary paper work preparation

ODFW	1 Administer all aspects of the project for Oregon, including budget oversight, personnel, staff work plans, project implementation and coordination, Steering Committee and technical issues meeting attendance.	<ul style="list-style-type: none"> 1) Attended the NWPPC meeting in support of restoring StreamNet's budget to full funding. 2) Regarding the hiring of our database manager: resubmitted the DBM announcement to personnel for posting, drafted and submitted a newspaper ad, drafted and submitted a Monster.com ad, reviewed the 12 DBM applications that came in - identified 5 to interview, contacted applicants and scheduled DBM interviews. 3) Attended the StreamNet Steering Committee meeting in Quakeville (Olympia), WA. 4) Held a meeting with ODFW Headquarters staff to negotiate moving the library to a larger, more suitable location.
ODFW	2 Participate/attend appropriate training and conferences in order to enhance technical skills which are relevant to StreamNet's mission.	<ul style="list-style-type: none"> 1) Two staff attended a 5-day Visual Basic (VBA) training course. 2) One staff member worked through a Visual Basic training manual to become more familiar with database development. 3) Two staff attended the OSU Forestry department's Arc 8.0 training class. 4) One staff completed the on-line ArcView training course through ESRI. 5) Two staff attended the OSU lecture, "Estimating species extent: surveys, sampling, and semantics." 6) Two staff participated in a review of Jim Lannan's comparison of genetics in wild and hatchery fish. 7) One staff attended the first and third of eight 21st Century Government training sessions. Second session was missed due to a schedule conflict.
ODFW	3 Produce and provide a Statement of Work, budget proposal, quarterly reports, and annual report for Oregon.	Submitted the 2000-4 Oregon StreamNet quarterly report to Regional StreamNet.
Region	1 Provide oversight for the StreamNet Program	Normal program administration continued during the quarter.
Region	2 Supervise StreamNet regional staff. Provide training opportunities for project staff to further their technical development and capabilities.	<ul style="list-style-type: none"> 1) Routine supervision of project staff continued. 2) The Regional Fisheries Biologist continued with self-directed Visual Basic training. He also attended the annual meeting of the Oregon Chapter of the American Fisheries Society, where sessions on the biology of coastal cutthroat and redband trout, and habitat/watershed restoration were presented. 3) PSMFC staff participated in a Leadership Development Workshop.
Region	3 Develop program budgets and manage / monitor expenditures	Work continued on getting a cost of living adjustment added to the FY2001 budget. The budget had been approved with no increase at all, resulting in several staff members having to conduct work on outside contracts, leading to deferral of some project tasks. The NPPC finally approved a 5% cost of living adjustment for the project.

Region	6 Coordinate with regional management agencies / entities and data using entities to determine information and data service needs and to assure rapid response to reasonable data and information needs.	Attended an open house for the habitat projects being conducted by the NMFS Northwest Science Center. Discussed the inventory of redd count data available in StreamNet with members of the Salmon Watershed Assessment and Monitoring project.
Region	7 Produce quarterly reports within 1 month after the end of each quarter	1) Work continued on the FY2000 report database. A quarterly report template was produced and the Third Quarter report was completed and submitted. The Fourth Quarter report was nearly complete at the end of the quarter. 2. A database was created for tracking all user requests. This database provides a central location for storing information on the types of users seeking help, the help they are seeking, and how we were able to help them. This database should help in the timely production of our quarterly and annual reports.
Region	8 Produce final report within 2 months of the end of the contract period	Work continued on the Fiscal Year 2000 annual report.
Region	9 Manage and serve the StreamNet Steering Committee through: Organizing and conducting committee meetings at least quarterly; Calling additional meetings as needed to address timely issues; and, Actively consulting with Steering Committee on program activities	The spring quarterly meeting was held in Olympia on March 1 and 2. All PSMFC staff participated in the meeting.
WDFW	1 The WDFW StreamNet state coordinator will participate in all Steering Committee and StreamNet Project management activities. The state coordinator and the state data manager will jointly manage all aspects of StreamNet in WDFW, including budget, personnel, work scheduling, and product delivery.	1) Lensegrav and Smith attended employee orientation in February. Sikora responded to WDFW's Personnel issues about her job duties and classification (CQ). She also attended two days of WDFW supervisor training in March. 2) In February, Lensegrav inherited a newer PC to accommodate the bulky GIS tools he uses. Late in March, he finally resolved all the configuration issues to access the GIS tools. 3) O'Connor and Sikora attended WDFW's February and March DMAD meetings. 4) O'Connor and Sikora hosted the March 1 and 2, 2001 SC meeting in Olympia. O'Connor provided input on re-arranging the agenda for Day 1 discussions, to link similar topics more closely. At the meeting, O'Connor provided project updates on administrative aspects, while Sikora and Woodard provided data updates. Brief follow-up assignments were completed within three weeks. There are still some outstanding data issues that have not moved toward resolution.5) O'Connor finalized and submitted FY2000 fourth quarter and final (annual) reports to Bruce Schmidt.

5) O'Connor drafted two versions of work statements and budgets for FY2001 in response to changes in available BPA funds and a new WDFW ruling about using BOTH overhead rates when state rates change in the middle of a contract period. Based on Woodard and Sikora's input, O'Connor finalized WDFW's March 26, 2001 buy back plan for work cut from our Statement of Work due to budget cuts effective earlier this fiscal year. O'Connor and Sikora developed a harvest data proposal to use potential new money (not the potential new habitat restoration money). One final round of budget and work statement adjustments was due to be completed in Q3.

Objective 5 Project Management / Coordination

Task 2. Participate in Fish and Wildlife Program Development Activities

Organize, facilitate, and/or participate in appropriate coordination meetings with BPA, CBFWA, the Council, ESA officials, ISAB/ISRP, and/or staff and management of participating organizations aimed at identifying ways that StreamNet might more effectively contribute to the Fish and Wildlife Program (FWP). Participate in advisory groups, task forces, and other groups whose purpose is enhancing the effectiveness of the Fish and Wildlife Program and its data development activities.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Participate in appropriate coordination meetings with BPA, CBFWA, the Council, ESA officials, ISAB/ISRP, and/or staff and management of participating organizations aimed at identifying ways that StreamNet might more effectively contribute to the Fish and Wildlife Program.	Discussions regarding StreamNet role under the Fish and Wildlife program continued with NWPPC staff and contractors and with the RAAC group. These issues are moving slowly and no specific conclusions were reached, although Council staff still sees a limited role for the project.
CRITFC	2 Where appropriate, participate in advisory groups, task forces, and other groups whose purpose is enhancing the effectiveness of the Fish and Wildlife Program and its data development activities, with particular emphasis on subbasin planning and R/M/E issues.	Approximately 6 formal and informal meetings of the above groups were held this quarter.
MFWP	1 Participate in appropriate coordination meetings with BPA, CBFWA, the Council, ESA officials, ISAB/ISRP, and/or staff and management of participating organizations aimed at identifying ways that StreamNet might more effectively contribute to the Fish and Wildlife Program.	Participated in the quarterly Steering Committee meeting.
ODFW	1 Participate in activities aimed at identifying ways that StreamNet might more effectively contribute to the Fish and Wildlife Program, including participation in Fish and Wildlife Program advisory groups and applicable regional policy, planning, and management forums.	Received and reviewed the Plan for Plan Work Group members list and action notes from CBFWA's Regional Data Management Committee January 10, 2001 meeting.

Region	1 Participate in appropriate coordination meetings with BPA, CBFWA, the Council, ESA officials, ISAB / ISRP, and/or staff and management of participating organizations aimed at identifying ways that StreamNet might most effectively contribute data / information and support to the FWP.	StreamNet participated in a BPA staff meeting, presenting an overview of the project, its capabilities and function, and the kinds of data that are available. StreamNet also participated in meetings of the Regional Data Management Committee in order to contribute recommendations based on experience with data management and to determine how StreamNet can best contribute to the regional data management efforts.
WDFW	1 No specific work planned; available as needed for coordination (see related work under Tasks 1.6, 2.2, 2.7, 4.2a, 4.7a).	O'Connor attended the Council Fish and Wildlife Committee's meeting on January 16 to become familiar with this process and to be available for any questions following Bruce Schmidt's StreamNet presentation. In March, O'Connor met with Brian Walsh and Council co-chair Larry Cassidy for a follow-up meeting to discuss StreamNet key role in Columbia Basin data management, following a detailed StreamNet presentation given at PSMFC by Bruce Schmidt.

Objective 5 Project Management / Coordination

Task 3. Coordinate with Other Related Activities

Maintain communications between StreamNet and other applicable regional and state-level fish and wildlife activities to identify means for collaborative data collection, storage, and dissemination. Collaborative data activities will target 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 agencies. Collaboration with coast-wide and private data collection/compilation efforts will be pursued when this supports overall project goals. Areas of particular emphasis are 1) participation in Fish and Wildlife Program monitoring and evaluation activities, and 2) exploring opportunities for integration of StreamNet data exchange formats into Fish and Wildlife Program contract terms and conditions.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Seek closer cooperation, coordination, and consistency of information management practices and standards between salmon restoration programs in the Columbia Basin (e.g. Mid-Columbia PUD's, LSRCP) by participating on appropriate work groups.	No activity this quarter. It is most likely that coordination of information management across programs (e.g. the Power Act, Forest Service, and LSRCP) will surface during subbasin planning in the second half of this fiscal year.
MFWP	1 Maintain communication, help coordinate activities with Montana Department of Natural Resources, Department of Environmental Quality and the Natural Resource Information System as they relate to StreamNet activities. Participate in appropriate conferences by preparing papers and giving presentations.	Ongoing.
ODFW	1 Establish / maintain working relationships with data collection projects within and outside ODFW to promote efficient and beneficial data sharing.	1) Reviewed NMFS's Info. Sys. Development Plan for the Columbia. 2) Reviewed and commented on HB 2675 and the potential changes to Essential Salmonid Habitat guidelines that it might cause.

Region	1 Coordinate the efforts of the StreamNet project with other data compilation projects occurring in the region. Address issues of data gaps, duplication of effort, data set integration, georeferencing standardization, scientific rigor, management needs, etc.	1) Personnel from the Nez Perce Tribe contacted StreamNet and subsequently met with the Regional Fisheries Biologist. The Nez Perce are beginning a formal habitat restoration program, and they expressed a desire to collect and manage their data in a manner that would make it widely available and useful. StreamNet personnel discussed basic database management concepts, showed them how they could store data in StreamNet format by using existing StreamNet databases and tools, and put them in touch with Hilary Forrest, CRITFC StreamNet programmer, to manage codes that the Nez Perce will need to use for data entry. StreamNet personnel from PSMFC and CRITFC also helped the Nez Perce Tribe personnel in getting Microsoft Access running on their computers. 2) Responded affirmatively to a question from NPPC whether we could assist the NMFS SWAM project by hiring a statistician for them on Council funding through the StreamNet project.
WDFW	1 Maintain working contact with Washington Hydro Framework partners and USGS Regional Ecosystem Office staff to promote effective sharing of hydrology base layers and attached fish and habitat data.	O'Connor drafted some ideas for out-of-Basin data development activities, including analysis of connections to current StreamNet Basin-related work, for future funding scenarios.

Objective 5 Project Management / Coordination

Task 4 Prepare Public Information Materials.

As needed, produce public information materials including updated versions of the project brochure, computer demonstration materials, and/or other appropriate materials

Objective 5 Project Management / Coordination Task 4 Prepare Public Information Materials.

SubTask 4.a Prepare Public Information Materials

As needed, produce public information materials including updated versions of the project brochure, computer demonstration materials, and/or other appropriate materials

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
CRITFC	1 Produce and update a Library brochure and Access guide listing services, hours and cost recovery fees.	Migrated library brochure and access information to the website. Brochure is printed on an as-needed basis.
MFWP	1 Montana will participate in review and recommendations.	
ODFW	1 Write informational articles on StreamNet data activities for natural resource oriented publications and give oral presentations to relevant user groups.	1) Bourne, Bowers, Brodeur, Cooney, and Hurn attended the ODFW Habitat Division Retreat - we shared information about StreamNet efforts and obtained a better idea of ODFW's information management needs. 2) Prepared and gave a presentation on the ODFW Riparian Lands Tax Incentive Program Database.

Region	1 Update the existing StreamNet brochure	The StreamNet brochure was updated during this quarter with new information, graphics, and layout. Copies were made for distribution, and the new brochure is now distributed to interested parties. It was also made available from the StreamNet web site.
Region	3 Create a demonstration of the data and services available by StreamNet. Update this presentation as necessary. Materials developed will be for presentations covering the data and services provided by StreamNet, and how to use the StreamNet web site to obtain data.	A slide show presentation of StreamNet's purpose, history, methodologies, and ways to obtain StreamNet data was created and presented to the Bonneville Power Administration's Fish and Wildlife and NEPA groups on March 20 at BPA's office. The presentation was slightly modified and presented to NWPPC Chairman Larry Cassidy and staff member Brian Walsh at PSMFC on March 28. The March 28 demonstration was conducted with a live hookup to the online database.

Objective 5 Project Management / Coordination Task 4 Prepare Public Information Materials.

SubTask 4.b Participate in informational meetings/conferences

Participate in appropriate state, regional, and national educational and professional conferences, including, where applicable, giving presentations, preparing poster session materials, and contributing to conference proceedings.

<u>Project</u>	<u>Work Element</u>	<u>Accomplishments, Second Quarter, FY2001</u>
IDFG	2 Serve as chairman and organizer for the 2001 ArcInfo User's Group Conference scheduled for October 2001.	Continued work on 2001 Northwest GIS User Group Conference.
ODFW	1 Participate in appropriate meetings & conferences as opportunities arise to highlight StreamNet programs & data	Attend the Multi-state Aquatic Resources Information System (MARIS) meeting. MARIS has primarily focused on Great Lake data, but they are now interested in branching out to stream level data and possibly linking with StreamNet in the PNW.
WDFW	1 Participate as opportunities arise to highlight StreamNet programs & data	Late January, Lensegrav manned a WDFW information booth at the Western Washington Sportsman's show to enhance awareness about StreamNet and WDFW's agenda.