

StreamNet Steering Committee
Meeting Summary
Meeting held at CRITFC office, Portland, OR
April 15-16, 1997

Summary of Decisions and Assignments

Note: All decisions and assignments are repeated in the main body of the minutes. There are listed here for easy reference and review.

- A subcommittee was formed to develop a draft charter and circulate it among the members (timeline = 60 days). Members of the subcommittee are: Drew Parkin, Dick O'Connor, Phil Roger, and Jerome Hansen.
- Stan Allen will provide examples of other charters (PIT Tag, PacFIN, RecFIN).
- Need to include an explanation for how to download/view the different versions available (ASCII, PDF, executable files, etc.). Drew, Liza, and Duane will work on this.
- Shaun McKinney will be invited to the next SC meeting and USFS will be approached regarding making this more formal.
- A subcommittee was established (Gretta Siegel, Duane Anderson, Matt Freid, and Drew Parkin) to develop a written fee structure that would define project-wide charges, products available, and a list of organizations whose fees are to be waived. The subcommittee should come up with several options and present them to BPA.
- Dick O'Connor will forward WDFW's fee policy for spatial data requests to Drew, including the amount of money collected and how it was spent.
- Drew Parkin and Stan Allen will work with Phil Roger in drafting language concerning StreamNet's role in serving the Program's information needs for the CBFWA document. Once the language is drafted, Phil will e-mail questions from CBFWA's review group to SC members.
- StreamNet should be more proactive with following up on leads for new business opportunities to serve the FWP. Drew Parkin and Duane Anderson should be contacted with new leads.
- When marketing the StreamNet product, we should include examples of which agencies/projects/management entities who use StreamNet data. This would provide tangible/valuable information to show where the information services were coming from and where StreamNet data was applied.
- Drew and Phil will follow up on the StreamNet/FWP connection issue and consult with FWP officials regarding how to best serve these needs. They will get back to the SC with recommendations.
- SC members should prepare a list of key data items that will serve as priorities for FY 98. Drew Parkin will contact each SC member for thoughts on this during May.

- Matt Freid will meet with each state's GIS people to develop fish distribution and other applicable exchange formats.
- Gretta Siegal and Drew Parkin will develop a strategy for a training session for new StreamNet users and report back to the SC.
- Gretta Siegal will recheck the related links section. Suggests keeping it focused. If anyone has changes or comes across new sites, please let Gretta know.
- Updated StreamNet contact list to be added to the external project management page ASAP.
- Project participants should forward ideas for web improvements to Liza Bauman. Also forward items to be posted to either the internal or public project management pages.
- Duane Anderson and Drew Parkin will prepare an outline of the annual salmon and steelhead status report. Matt Freid will identify potential map products. Ray Beamesderfer and Bob Woodard will be asked to assist with writing of certain sections.
- It was agreed that online report generation was a good idea for the future (possibly add to FY 98 work statement?) but that our collective plates are probably too full for much attention this FY.
- The SC agreed that it made sense to expand the annual status report to include resident salmonids. Montana would be a good place to start due to the extent of existing data. Whether or not this will be included in the upcoming report depends on time commitments and the applicability of existing MDFWP data.
- Doug Taki has been in contact with fish biologists involved in genetics study, including at NWIFC. It was determined that Doug should set up a meeting to discuss this - probably in Olympia with Dick, Duane, Ken Pomeroy and Jim Shaklee. Janet will send info she has on Montana's genetic data efforts to Doug Taki. She will participate via phone if necessary.
- Dick O'Connor will forward to Duane data exchange standards associated with SASSI.
- Drew Parkin will prepare a brief white paper on the ESA species distribution issue. Using this, MT, OR, WA, and ID SC members will contact state's heritage programs regarding their interest in participating.
- Daniel King will send his project tracking data interface to anyone interested via an EXE file. Duane Anderson will resolve questions with BPA data and create a prototype application. SC members will be given an opportunity to review.
- Stan Allen will revise the resident fish hatchery white paper to incorporate SC comments. MT will be used as a test case following completion of the white paper.
- PSMFC will consult with BPA, NPPC, and FPC regarding systems operation data and report to the SC.
- Matt Freid will set up conference calls or meeting with states to discuss regional consolidation of the distribution product.
- Matt Freid should add ESA designated critical habitat map to the map catalog. Map cataloging keywords and themes need to be updated. Check to see if we have all Montana

bull trout maps.

- SC agrees that we should develop a region-wide approach to 100K maintenance.
- Drew, Duane, and Matt will prepare a draft 100K maintenance strategy - possibly in the form of a proposal for funding.
- Janet Decker-Hess will have StreamNet participants added to MRIS' "GIS News" mailing list.
- Get any feedback on white papers currently posted to the internal project management page to Drew Parkin via e-mail by May 1. Drew will make changes and finalize the documents and post them on the public project management page.
- Doug Taki to add a white paper on genetics data.
- The three papers prepared by Doug Reece will be posted to the internal project management page (Duane).
- SC recommends we look at keeping other white papers in the work statement, but delay the due dates as deliverables or make low priority papers optional. This would give the project the ability to be flexible and respond to emerging high priority ideas not in the work statement, such as project data and PAC information.
- Put the home page address on the front cover of the brochure. Add INRIS to list of participants. Add logos of all participants onto the inside front or back cover. Develop a one-page tri-fold version of the brochure that will direct people to visit the home page.
- The next meeting will be held at the Big Mountain Resort/Lodge near Kalispell, Montana on Mon.-Tues., July 14-15 (fly in on Sunday night). The group will spend Tuesday afternoon at MDFWP project office.
- Quarterly reports are due now, so please submit them to Stan Allen.
- Please review the proposed changes to the current SOW by 4/28 and return any comments/changes to Drew. Drew and Stan to meet with the new COTR at BPA soon thereafter to review the SOW and get BPA's concurrence with any changes.
- Please start drafting budgets for next fiscal year.
- SC agreed that PAC is a valid application for StreamNet data and expertise and endorsed participation with this activity.

Detailed Meeting Minutes

Note: Major decisions and assignments are highlighted with the arrow symbol as shown in the summary above.

Attendees:

- Phil Roger, CRITFC
- Jerome Hansen, IDFG
- Krista Schauer, CRITFC
- Duane Anderson, PSMFC
- Janet Decker-Hess, MFWP
- Stan Allen, PSMFC
- Doug Reece, IDFG
- Doug Taki, Sho-Bans
- Gretta Siegel, CRITFC
- Matt Freid, PSMFC
- Dick O'Connor, WDFW
- Drew Parkin, PSMFC
- Steve Pastor, USFWS
- Liza Bauman, PSMFC
- Ray Beamesderfer, ODFW

■ PROJECT ADMINISTRATION

Project management and oversight evaluation

BPA has finished its evaluation/review of the StreamNet project. A new COTR has been assigned (John Rowan, with the Fish and Wildlife Group, for three months to begin with). Alan Rugar, also with the Fish and Wildlife Group will be BPA's representative on the Steering Committee. The Committee agreed with BPA's findings, and concluded it would be appropriate to respond to BPA's recommendations and express appreciation to the evaluation team.

Proposal for project charter

One of BPA's principal recommendations was that a charter be prepared to guide the project. The SC agreed and proposed developing a charter to guide its operating details (internal workings of the SC--participants, how they cooperate, etc.) and describe the relationship of the project to the FWP (external workings of the SC). It was recommended that the charter distinguish between technical collaboration (via participation in the SC) and involvement/decisions on policy level issues.

- A subcommittee was formed to develop a draft charter and circulate it among the members (timeline = 60 days). Members of the subcommittee are: Drew Parkin, Dick O'Connor, Phil Roger, and Jerome Hansen.
- Stan Allen will provide examples of other charters (PIT Tag, PacFIN, RecFIN).

Communications, project management page

Communicating via e-mail seems to work well, aside from the problem of file transfer between systems using different protocols. Will set up "cluster" groups (steering committee, project management team, river reach system team, etc.) on the internal project management page for easier communicating to groups of people involved in select issues. There was an agreement that e-mail not be used for confidential communications. (Only very rarely are project communications of a confidential nature.) As general practice, please respond to/follow-up with the sender concerning critical e-mail in order to indicate that the message has been received.

Regarding the project management page, the SC discussed what information belongs on the public versus private pages. SC will receive notice regarding new items/final documents that are proposed to go onto the public page. Anyone concerned with any of these postings should communicate this. Otherwise postings will go ahead as scheduled.

Draft items (white papers, quarterly progress reports, work statements, etc.) are to go onto the internal page only. Final products will be posted on the public page.

- Need to include an explanation for how to download/view the different versions available (ASCII, PDF, executable files, etc.). Drew, Liza, and Duane will work on this.

Potential expansion of Steering Committee

While there is active interchange with several additional agencies (e.g., NMFS, NW Power Planning Council, EPA, BLM, and USFS), none of these are currently members of the SC. Currently all SC members have a direct contractual involvement in the project. If the SC is to be expanded to include additional agencies we may want to create a new SC arrangement to allow participation without having to deal with funding and contract issues). Shaun McKinney (USFS) was named as a potential SC participant who would add significant value to the project.

- Shaun McKinney will be invited to the next SC meeting and USFS will be approached regarding making this more formal.

Fees Policy

CBFWA has inquired regarding whether StreamNet should charge for some services. Currently only the Library has a fee structure in place. Should we also pursue a fee structure for other services (such as custom data requests, GIS maps, or other special projects and services that may be requested)? If we did charge for services, how much? What would we do with the money and how would we account for it?

There are two compelling reasons to charge a fee for services: cost recovery and controlling product demand (avoiding over-use/abuse of services). Charging consultants is another issue. Would we have a special policy for consultants working on a Fish and Wildlife Program project? What are StreamNet's contractual obligations to providing data (tabular, library, and spatial)? At the least, a fee policy should be considered for GIS requests.

- A subcommittee was established (Gretta Siegel, Duane Anderson, Matt Freid, and Drew Parkin) to develop a written fee structure that would define project-wide charges, products available, and a list of organizations whose fees are to be waived. The subcommittee should come up with several options and present them to BPA.
- Dick O'Connor will forward WDFW's fee policy for spatial data requests to Drew, including the amount of money collected and how it was spent.

■ Fish and Wildlife Program

Program-wide framework update

Phil Roger presented an update on the Fish and Wildlife Program. He suggested that CBFWA was attempting to address specific issues including: vague goals, lack of criteria for measuring progress, no clear framework for making decisions, duplication of research, and insufficient monitoring and evaluation.

A model for the process by which policies/management would be made, has the Region (a specific policy body) identifying goals, obligations and constraints. The region would then reconcile these goals, obligations and constraints with a conceptual foundation (technical basis), then create a policy that would identify objectives and strategies (biological, ecological, etc.). The policy would then be reviewed (are the strategies acceptable?) and, if the answer was yes, the projects would be implemented.

The adaptive management portion of the process would involve research and monitoring (performance indicators, critical uncertainties, and resource status), evaluation (by a technical group) of objectives and strategies, goals, and constraints and obligations. The program could then be modified if necessary. Phil suggested that this was the area where StreamNet could play an important role, specifically by serving the Program's information compilation and delivery needs.

FY98 prioritization status update

BPA's direct funding for the Fish and Wildlife program in 1997 is \$92 million. If things go as anticipated, in 1998, it will be decreased by \$20 million. Assuming current trends, by the year 2000, the amount of direct funding will be zero--most of the money will go towards capital construction, spill, etc.

One potential scenario for dealing with the \$20 million decrease is:

Continue 1998 funding at 1997 levels	\$ 8 million
Spread capital construction out over 5 years	\$10 million
Budget cuts at 2-3%	\$ 2 million

There is a proposal to review program-wide projects, such as predation, enforcement, StreamNet, captive breeding program, etc. Peer review groups for all projects proposal will be increased starting in 1999. Projects will have to meet the National Academy of Science's rigorous scientific and academic standards.

Usefulness of the information will be an important criteria in reviewing project proposals and descriptions. It was suggested that, if anything, the program-wide coordination aspect of the Fish and Wildlife Program has historically been underfunded. Information management and a committee structure of adaptive management should arguably receive 10-15% of the Council's funding -- only 2-4% is spent now.

- Drew Parkin and Stan Allen will work with Phil Roger in drafting language concerning StreamNet's role in serving the Program's information needs for the CBFWA document. Once the language is drafted, Phil will e-mail questions from CBFWA's review group to SC members.

■ STREAMNET RELATIONSHIP TO FWP

StreamNet assistance to FWP activities

The SC agreed that high priority should be given to identifying how StreamNet can best support the FWP and make it more effective. The StreamNet brochure identifies several ways that StreamNet can assist the program. For example, we could offer custom data services and prepare data exchange formats and data entry mechanisms for use by field-level projects. One area where we could provide real value would be to provide access to data and reports. As an example, we could add a FWP information exchange page to our web site for all projects, which could include a query system. We have the storage and access capabilities -- let's work with potential users to identify the needs of different groups and provide the tools and services they need.

Another potential service StreamNet could provide to track the spending patterns and how they change by area, type, project, etc. We currently have PMIS data from 1993 to current. USFWS/IDFG could use a new online data entry interface for hatchery data.

- StreamNet should be more proactive with following up on leads for new business opportunities to serve the FWP. Drew Parkin and Duane Anderson should be contacted with new leads.
- When marketing the StreamNet product, we should include examples of which agencies/projects/management entities who use StreamNet data. This would provide tangible/valuable information to show where the information services were coming from and where StreamNet data was applied.

StreamNet connection to FWP decision process

How StreamNet should interact with the FWP was discussed. It is clear that more frequent contact with NPPC, CBFWA, etc. is in order. We should specifically consider how StreamNet should link with the ISAB and the monitoring and evaluation-development process in order to ensure that we are focusing data compilation efforts in areas that will benefit M&E and related activities.

- Drew and Phil will follow up on the StreamNet/FWP connection issue and consult with FWP officials regarding how to best serve these needs. They will get back to the SC with recommendations.

Data development priorities for 98

The FY 98 work statement will be prepared in draft form for review at the July SC meeting. Identification of priority data development areas will be a key element.

- SC members should prepare a list of key data items that will serve as priorities for FY 98. Drew Parkin will contact each SC member for thoughts on this during May.

■ TECHNICAL APPLICATIONS

Technical applications strategy update

Duane reviewed the four phases of the technical applications strategy: 1) port existing DS

data to the Internet; 2) explore options for long-term data management and delivery of ad hoc geographical data on the web; 3) prepare recommendations for and acquire hardware include web server, SQL server, and GIS/map server and software; 4) install the equipment and port data. We have just completed phase three and a phase three status report is available on the StreamNet project management home page. Duane has determined that the entire system can be procured within the budget. The system will be scaleable so that it has room to grow. There are several stages to porting the data from the Unix over to the new system. We will use the www.test.streamnet.org site for the first 6-8 weeks after the new hardware is installed

GIS update, future plans

Matt Freid was introduced as StreamNet's new GIS data manager. A P6/200 computer has been purchased as has a full ARC-INFO license and a plotter. Working with the 100K reach system and distribution data is Matt's highest priority for the next six months. Matt intends to work with state GIS staff to identify a format that all states can use (by HUC, etc.) to maintain a regionally-consistent 100k system. The 100k database will be maintained in multiple formats to allow for the states to retain their current separate huc data structure and still coordinate with StreamNet's regional approach. A single, regional coverage will be assembled and distributed to the states, and an ARC /INFO library structure will be constructed to allow for easy import and export of individual HUCs. It is hoped that the states will maintain parallel structures for data exchange between state/region.

Matt proposes to provide a consistent cartographic product (such as a 100K reach atlas) for both the Web and in print. GIFs are available on the Web through the map catalog. When the new hardware and software installed, he'll work on getting the support for the spatial interface engine going. Distribution data (with LLID field) will be housed on the SQL server. Matt and Duane need to meet with the state GIS people to come up with a way to use their data and smooth out the process.

New themes and classes of data need to be added consistently, for example, have habitat data keyed off LLID. The LLID is made up of the latitude and longitude and reach number of the river at its mouth. New themes that could be developed include ownership, topography, forest practices, management themes, and ESUs.

- Matt Freid will meet with each state's GIS people to develop fish distribution and other applicable exchange formats.

■ **LIBRARY**

Status, planned activities

The library has moved to its new facility. The new space is half the space originally proposed, but it has worked out well so far. The cataloguer (hired last fall) is up to date on cataloguing BPA, FWS, CRITFC collections. The inter-library loan service works well, and they are very active in the duplicates exchange program.

Cooperative agreements with NWPPC and NMFS are not yet signed. The NPPC agreement is imminent. Propose holding an open house once furniture and equipment are

in place. Will send an announcement to mailing list to invite all to the open house.

Gretta Siegal suggests developing a one-hour training session for new users to show them how the StreamNet system works. This training session could be taken around to various agencies to show them what StreamNet can do.

- Gretta Siegal and Drew Parkin will develop a strategy for a training session for new StreamNet users and report back to the SC.

Proposals for on-line services

There are currently two cataloguing systems in use: the international standard and StreamNet -specific. Do we want to merge them or keep them separate? The goal of the library is to have all documents available through the web site. Also, do we include bibliographies from other collections, such as Oregon and Washington? Also could catalogue on-line/electronic documents, such as annual report (not white papers!) A white paper has been prepared regarding online library recommendations and is currently available for review.

Tour of new facility

Gretta Siegal and Krista Schauer gave a tour of the new facility which is located on the street floor of the office building where CRITFC is located. The facility is high quality and will be a real plus to the project.

■ INTERNET ENHANCEMENT

Home page status

Several new data categories and holdings have been added. No significant changes in the library page. Map products and builder have been enhanced. Need to add StreamNet logo to products, Oregon's very nice CSRI maps as an example. September is the goal for comprehensive fish distribution maps online. Need to add reports ASAP to the reports section. Gretta has several reports to which we could provide links. The glossary is new and enhanced.

Reproduction of resident fish pictures for our web site has been approved by Windsor Publications. Gary Christofferson will resize the images so the file sizes will be smaller. Gary is developing an interactive picture for the stream education section. Montana has lots of riparian educational information they can provide/share. This section will list all scientific and common names for Northwest species of fish, their states, ESA status, etc.

An additional idea would be to include with the image of the resident fish a narrative and distribution map by state/basin/region. Ray Beamesderfer has a photo CD with images of real fish that could be added to the site - could even create a searchable photo-library. Another idea is to tie-in "before" and "after" photos of sites where habitat projects have been undertaken.

- Gretta Siegal will recheck the related links section. Suggests keeping it focused. If anyone has changes or comes across new sites, please let Gretta know.

The basis statistics show an increase in use -- about 18,000 hits per month. 50-70% of the

daily use is on the online database. Harvard University is doing an educational piece on CD and may want to use PNW as case study, using StreamNet data. The Fish and Wildlife Program web site needs to link to StreamNet. Drew will follow up on this.

Doug Reece recommends supporting HTML version 3.2, as long as it works with Internet Explorer, Netscape, and Windows 3.1 (i.e., stop supporting Mosaic). Java and Java Script could be used to jazz-up the site, but the Committee thought this feature should be delayed for a year or two. There is also a security issue with Java applets being refused by some systems. Doug has prepared a report on the browser compatibility issue that is available through our internal project management page.

- Updated StreamNet contact list to be added to the external project management page ASAP.

Distributed System

The future of the DS was discussed. It was noted that the project needs to build its web site to meet the needs of its users, which are typically 2-3 years behind the cutting edge of technology. For example, MFWP has no CD ROMS, Web access, or network access from which to download the Distributed System. USFWS also does not have CD ROMS. Maybe subsets of the DS could be copied onto diskette for MFWP and USFWS.

The following DS options were discussed: 1) It could be kept as is, with Montana data modules (resident fish) added; 2) It could be updated with dbase files; 3) The interface could be changed to make it more web-like, with limited choices and which could produce reports. It was concluded that - at least for this year - we need to retain two ways of accessing the data: Internet and DS. It was decided that for the short term (by June 1), the DS should be updated using existing structures and dbase tables, with existing datasets updated to include 95 and 96 where data is available. The DS would then be distributed by diskette. For the longer term, a new DS structure and code would be developed that would include flow data, monitoring report, new data sets and code using Access. To avoid dual development, future DS enhancements should be compatible with web development.

Proposed enhancements to “look and feel”

Liza Bauman has developed a list of web enhancement possibilities. Proposed enhancements included: improving graphic appearance and add visual interest with color, clip art, updated layout, etc., include a site map, make glossary section easier to locate, add project PowerPoint presentation to the internal project management page so that it could be downloaded locally, Update project description section, have documents available in PDF format only (users could change Word documents!) on public page, and in Word also on the internal page, possibly include an image map as the tool bar.

- Project participants should forward ideas for web improvements to Liza Bauman. Also forward items to be posted to either the internal or public project management pages.

■ SALMON AND STEELHEAD REPORT

Proposal for preparing new edition

Doug Reece prepared a paper (available through our internal project management page) and led a discussion concerning incorporating non-standardized data into StreamNet. Examples of state-centric data include model watersheds, state fish and wildlife department data, EPA's Rogue River project, RIS, Oregon's CSRI -- basically any data

that an agency might have that is not standard on a regional basis, but would be good to include on the web site.

Dick O'Connor suggested a tie-in to the reference material and see if it could be added to any additional data. This would show the mark of professional data compilation.

Genetics and populations

Doug Taki presented his findings regarding the potential for adding genetic and population data to StreamNet. The issue is timely, given the current activity concerning regarding ESA and broodstock issues, recent NRC, ISAB reports, etc. Questions involve the accuracy of data, the willingness of researchers to share data, and the variety of data collected. Janet Decker-Hess, Dick O'Connor, Doug Taki, and Phil Roger are the SC members with the greatest knowledge of this issue and should take the lead in determining how to proceed. Janet indicated that MDFWP contracts stipulate that genetic data be included in information-gathering.

Also discussed was the relationship of WDFW's SASSI and the ODWF wild fish report to the genetics issue.

It was suggested that, at the least, StreamNet could value-add to the genetic data by including reach numbers so that the data could be mapped, and establishing data exchange standards.

- Doug Taki has been in contact with fish biologists involved in genetics study, including at NWIFC. It was determined that Doug should set up a meeting to discuss this - probably in Olympia with Dick, Duane, Ken Pomeroy and Jim Shaklee. Janet will send info she has on Montana's genetic data efforts to Doug Taki. She will participate via phone if necessary.
- Dick O'Connor will forward to Duane data exchange standards associated with SASSI.

ESA species distribution

There is increasing demand for ESA species range data - including fish and other aquatic species. Heritage programs have data on this for non-salmonid species. StreamNet has - or is - compiling, data on salmonids. The idea of StreamNet distributing these data was discussed. If we did, it would be as a "red flag" only, i.e., identifying watersheds with ESA species. The question of future funding of heritage program work was discussed. There was consensus that we should not do this unless there was specific benefit to the FWP.

- Drew Parkin will prepare a brief white paper on the ESA species distribution issue. Using this, MT, OR, WA, and ID SC members will contact state's heritage programs regarding their interest in participating.

Project tracking

Project tracking is acknowledged as a high priority for StreamNet. Duane Anderson has prepared a white paper (available on the internal web site) on this issue. While BPA-funded FWP project tracking is an obvious need, StreamNet could also track OR's Coastal Salmon Restoration Initiative and other related projects. All of this would be

beneficial for FWP monitoring and evaluation purposes. Draft data standards will be made available soon. The challenge would be to capture and standardize the data. We could obtain BPA and Oregon data, georeference it, and create a pilot web page to showcase potential uses [check out UC-Davis web site for their ICE project as an example of what could be done].

The prototype data entry screen that was developed by IDFG would make it easier for people to enter data in a standardize format. Spatial data levels could be determined at the start. We could widen the data layer to include research, protection, and restoration point data.

- Daniel King will send his project tracking data interface to anyone interested via an EXE file. Duane Anderson will resolve questions with BPA data and create a prototype application. SC members will be given an opportunity to review.

Resident fish hatcheries and planning

A white paper has been prepared on this subject. Stan Allen feels that it is in good shape and will require little modification. Resident fish data exchange standards will parallel existing anadromous standards. MDFWP is prepared to provide data this FY. Duane Anderson cautioned that there are still issues with anadromous hatchery data and that these issues will likely plague our incorporation of resident data.

- Stan Allen will revise the resident fish hatchery white paper to incorporate SC comments. MT will be used as a test case following completion of the white paper.

System operations

The potential for incorporating historical trend data on mainstem systems operations was discussed. We do not want to duplicate Fish Passage Center activities but do see value to supplying trend data.

- PSMFC will consult with BPA, NPPC, and FPC regarding systems operation data and report to the SC.

Riparian and aquatic habitat

Riparian and aquatic habitat, road density could be included. SAS inventory report is due out soon. Dick O'Connor will send out to SC.

Stream surveys

StreamNet is working with IRRIC to develop data exchange standards and a region-wide data delivery strategy. A meeting was held in December with state representatives to discuss inter-state cooperation on stream surveys. The idea have gone no further due to other commitments. The SC agrees that we should follow-up on this.

■ CURRENT DATA ACTIVITIES

Anadromous trend and distribution data

Anadromous fish distribution product is nearing completion. WDFW is in final stages with only a huc or two still needing review by field staff. ODFW is complete. Idaho is

concerned with juvenile distribution data as it relates to the 100K reach scale. MDFWP resident fish distribution data is complete for salmonids and many other species. They continue to expand distribution data to less well-known species.

Washington and Idaho production data development is on schedule. Oregon is behind but intends to catch up when a new staff person is hired.

- Matt Freid will set up conference calls or meeting with states to discuss regional consolidation of the distribution product.
- Matt Freid should add ESA designated critical habitat map to the map catalog. Map cataloging keywords and themes need to be updated. Check to see if we have all Montana bull trout maps.

■ RIVER REACH SYSTEM

Visual pass strategy

PSMFC will subcontract with WDFW to do the Washington visual pass, and with the ODFW in OR, ID, and MT. Two training sessions have been set up - the first on May 6-8. Our staff will attend the first one. It is estimated that it will take approximately 8 hours per 100K quad, with 250 quads total.

100K maintenance strategy

The issue of long-term maintenance needs to be resolved. Janet Decker-Hess mentioned that MRIS is probably preparing a grant proposal to maintain the database in MT. Duane Anderson recommended that this be accomplished at the regional level in order to foster consistency.

- SC agrees that we should develop a region-wide approach to 100K maintenance.
- Drew, Duane, and Matt will prepare a draft 100K maintenance strategy - possibly in the form of a proposal for funding.
- Janet Decker-Hess will have StreamNet participants added to MRIS' "GIS News" mailing list.

■ INTERAGENCY COORDINATION PROPOSALS AND OPPORTUNITIES

Topic was passed over due to lack of time.

■ FY97 PROJECT STATUS

Project status update

CRITFC has made good progress on cataloguing. The tribal data is behind schedule due to delay in hiring caused by lack of response. The tribal data plan inventory should be completed soon, so that progress can be shown on this task. Possibly this contract/subcontract could be extended so that carry over money would not be lost.

White papers

There are currently six draft white papers on the internal web page: Resident Fish hatcheries, NW Hydro System, VAX, Library, 100K system (and its connection to the USFS' 24K system), and mitigation project data (not a contract deliverable).

Drew Parkin proposed setting a three-week deadline (May 1) to review the six draft papers.

- Get any feedback on white papers currently posted to the internal project management page to Drew Parkin via e-mail by May 1. Drew will make changes and finalize the documents and post them on the public project management page.
- Doug Taki to add a white paper on genetics data.
- The three papers prepared by Doug Reece will be posted to the internal project management page (Duane).
- SC recommends we look at keeping other white papers in the work statement, but delay the due dates as deliverables or make low priority papers optional. This would give the project the ability to be flexible and respond to emerging high priority ideas not in the work statement, such as project data and PAC information.

Budget status and budget reporting

All participating agencies are within budget and foresee no issues regarding this.

■ OTHER ITEMS

Brochure

- Put the home page address on the front cover of the brochure. Add INRIS to list of participants. Add logos of all participants onto the inside front or back cover. Develop a one-page tri-fold version of the brochure that will direct people to visit the home page.

Next Steering Committee Meeting

- The next meeting will be held at the Big Mountain Resort/Lodge near Kalispell, Montana on Mon.-Tues., July 14-15 (fly in on Sunday night). The group will spend Tuesday afternoon at MDFWP project office.

Quarterly Reports

- Quarterly reports are due now, so please submit them to Stan Allen.

Statement of Work

- Please review the proposed changes to the current SOW by 4/28 and return any comments/changes to Drew. Drew and Stan to meet with the new COTR at BPA soon thereafter to review the SOW and get BPA's concurrence with any changes.

Budgets for FY98

The July SC meeting will focus on FY 98 work statement and budget planning.

- Please start drafting budgets for next fiscal year.

Production Advisory Committee

Paul Lumley, CRITFC's member of the PAC to the Columbia River Fishery Management Plan, came to the meeting to discuss the possibility of StreamNet providing help with their Annual Production Report (annual), Pre- and Post-Season Reports (annual), and possibly In-Season Reports that would reflect current hatchery numbers (monthly?). Paul provided samples of PAC tables and formats.

- SC agreed that PAC is a valid application for StreamNet data and expertise and endorsed participation with this activity..
- Paul will prepare a summary of this meeting for presentation at the 5-13 PAC meeting. He would need a commitment from all parties that would provide information. PAC would then identify table outlines and structure of reports.
- StreamNet (with Paul Lumley's help) will prepare a white paper for PAC., which meets next on May 13.

■ MEETING WRAP-UP

- Assignments, meeting notes, and due dates discussed at the SC meeting will be posted to the internal project management page. Liza Bauman will transcribe notes. Drew Parkin will review her notes and develop the assignment list.

(Thanks to Liza Bauman for preparing these minutes.)