

**Connecticut River Atlantic Salmon Commission
Turner Falls, Massachusetts
Meeting Minutes
November 16, 2006**

Agenda Items:

1. Determination of Quorum, Approval of Today's Agenda & Minutes of February 2, 2006 Meeting

Vice Chair Mr. Wayne MacCallum opened the meeting at 10:09 AM and adjourned at 11:13 AM.

Vice Chair Mr. Wayne MacCallum asked each attendee to introduce him/herself including members of the audience (see **Attachment 1**). He determined that a quorum was present. Mr. Tom Menard motioned to approve the minutes from February 2, 2006, Mr. Bill Archambault seconded the motion and the motion was approved by Mr. Wayne MacCallum. No additions or modifications were requested for today's agenda.

2. Report of the Executive Assistant

Ms. Martha Naley served as the Acting Executive Assistant and provided a verbal summary of the Report of the Executive Assistant prepared by Ms. Janice Rowan. No questions were asked and the report was submitted for the record.

Also, Ms. Naley advised the members about the Connecticut River Migratory fish Restoration Forum call for speakers. The forum is scheduled for February 14, 2006, in Hadley, Massachusetts.

Ms. Naley provided a verbal summary of the Commission Account Balance (\$1,351.37) as provided by Ms. Rowan.

Ms. Naley also provided a verbal summary of Alex Haro's and Jeff Fryer's paper on the "Evaluation of Salmonsoft FishTick & FishRev Digital Video Fish Counting System for Use at Fish Counting Facilities in Eastern North America."

3. Report of the Technical Committee Chair

Mr. Caleb Slater read aloud the report. Mr. MacCallum questioned the technical report, "Relative to the strategic plan, what does the 10.9 M green eggs mean?" Mr. Jay McMenemy responded "We are short of our goal." Mr. MacCallum asked, "With the fry we put out last year and this year, does it mean the returns are going to be low?" Mr. Slater stated that there is no tight correlation between the number of fry put out and number of fish coming back. The answer is "We don't know." Mr. Archambault stated that there is a tighter correlation between the number of smolts put out and the number of

fish returning. Mr. Stephen Gephard stated that return rates have bounced around. If the ocean conditions improve, the return will go up. Mr. MacCallum stated that the Commission needs to be addressing the returns publicly now and to advise the public that we have never achieved to level we outlined in the strategic plan. Mr. Steve Rideout asked from the audience “Will there be conclusive evidence about success of returns?” Mr. Peter Basta responded, “Total numbers of adults have increased and are on an upward trend. Conditions are improving slightly but nowhere near the numbers of the 1960’s and 1970’s.”

4. NEASC/CRASC Congressional Initiative 2007 Discussion

Mr. Lee Perry arrived at this point and provided an update on activities. First he expressed concern that Mr. Charlie Thoits was not feeling well and he asked that members send their regards.

Regarding the New England Joint Venture, they have held 5 meetings on “needs.” The meetings concluded that Congressional support for research was of a higher need than additional Congressional support for fish passage and habitat money at this time. Mr. Perry stated that there is great need to find out if the fish are getting out and if they are surviving. The needs are (1) Research, (2) Production out of hatcheries, and (3) Maintaining habitat. The Joint Venture is trying to put together a Draft 5-Year Research Plan to be presented at the January meeting. Mr. Perry suggests that there needs to be a coordinated approach to Congress in terms of who/when advocates meet with Congress. Also, Mr. Perry suggested that since NH will have a complete turnover in Congressional representatives, the Commission needs to strategize about meeting and educating new members.

Mr. Archambault indicated that the U.S. Fish and Wildlife Service intends to visit Capitol Hill en masse (all Project Leaders) February 26 through March 1, 2007. Perhaps the New England delegation could pull together a forum the 1st or 2nd week of February.

Mr. Gephard stated that inflation was taken into account with respect to buying power in the 5-Year Plan. TNC will help with design and layout.

Mr. Steve Rideout asked with the Penobscot River was part of the 5-Year Plan and Mr. Perry answered “No, the Penobscot is a habitat issue not research.”

5. Other Business

Mr. James Carroll asked the Commission to recognize and thank Ms. Janice Rowan, Mr. Chris Alexopoulos (USFS) and Ms. Judy Tumosa (NHFG) for their contributions to the Salmon in Schools Program in VT and NH. When the Vermont Institute of Natural Science could no longer support their school program, Ms. Rowan, Mr. Alexopoulos, Ms. Tumosa (and Mr. Carroll) filled the vacuum by organizing a Teachers Orientation and communicating with all the VT and western NH schools. The So.VT Natural History Museum also added 8 new schools this year. Connecticut held the largest single new

schools class to date bringing in 17 new schools for a total of 76 in Connecticut. “The school program is just growing like mad!” Mr. Robert Jones stated “It is starting to get difficult to supply everyone.”

Mr. Carroll suggested that the Commission send Ms. Rowan a get-well card. All agreed and wished her a speedy recovery.

Mr. Archambault announced that Ms. Rowan received the Regional “Sense of Wonder Award.” This is the first time that a Fisheries Program representative has received the award. Ms. Rowan will now compete on the National Level. We are very proud of Ms. Rowan!

Mr. Perry also wanted to celebrate that the shad transport truck had been totally refurbished through a large partnership effort.

Mr. MacCallum asked Mr. Michael Masnik in the audience, from the Nuclear Regulatory Commission, if he would like to comment. Mr. Masnik stated that the Vermont Yankee Plant licensing action requires an EIS, compliance with the Magnuson-Stevenson Act, Endangered Species Act and essential habitat. NRC is looking at studies done on the Connecticut River. He and his co-workers were in town to understand how the dams affect the powerplant operations. They have been collecting information for the past 2 months. Mr. Masnik asked the Commission to comment on the DEIS. Mr. Slater agreed to be the point of contact.

Mr. Thomas Menard requested that the acting Executive Assistant e-mail members for a good date for the next meeting.

**REPORT OF THE EXECUTIVE ASSISTANT
FOR THE NOVEMBER 16, 2006 CRASC MEETING**

The biennial Connecticut River Migratory Fish Restoration Forum has been scheduled for February 14, 2007 at the USFWS Headquarters in Hadley, MA. The call for proposals was issued on November 13, 2006. This Forum was first initiated in 1999 to bring researchers and managers together to improve communication and collaboration on projects needed for the scientific management of migratory fish in this watershed.

A Salmon-In-The-Schools Committee with members from the Connecticut River Salmon Association, Southern Vermont Natural History Museum, New Hampshire Fish and Game, Vermont Fish and Wildlife, U.S. Forest Service and the U.S. Fish and Wildlife Service convened to organize the first cooperative training for teachers in New Hampshire and Vermont. The measure was taken to ensure that the educational program will continue this school year since the Vermont Institute of Natural Science concluded its involvement. Training was successfully conducted at the Montshire Museum on November 8, 2006. The NH/VT program added about 18 new teachers this year. Attendees included about 40 people in total, instructors, liaisons, and experienced teachers inclusive. Similar training was conducted in Connecticut by the Connecticut River Salmon Association on November 9, 2006. They added 16 new teachers this year – the single largest class of new teachers since they initiated the program. Training is planned for teachers in western Massachusetts in January 2007.

At the last two meetings, the Commission discussed the use of fish counting software and the need for a pilot study to assess such software. Subsequently, the USFWS Assistant Regional Director-Fisheries funded part of the proposal while Northeast Generation Services funded the remainder. The project was coordinated and conducted by Mr. Alex Haro, USGS-Conte Anadromous Fish Research Center. A written evaluation of the software was prepared upon project completion by Mr. Haro and Mr. Jeff Fryer.

Dramatic declines in the basin herring population precluded any trap and truck activities this season. This has prompted some discussion about species management alternatives. As a consequence, the Coordinator submitted a Science Support Project grant proposal in cooperation with Mr. Ben Letcher, the U.S. Geological Survey. The study, *Identification of blueback herring population structure among the Connecticut River and New England Rivers and within the Connecticut River*, was funded for a total of \$69,600 in the next two years. DNA samples have been collected from herring in the mainstem Connecticut River over several years, and herring in rivers in New York and New Hampshire. Assistance was provided by the U.S. Fish and Wildlife Service, U.S. Geological Survey, University of Connecticut, and the New York Department of Environmental Conservation. The information obtained from this study should inform management decisions regarding transfers/genetics for restoration efforts.

Finally, The Technical Committee noted the loss of Mr. Warren Fisher, one of the most devoted fry stocking volunteers known to the program. He and his wife have contributed a great deal of time to the program over the years and he will be missed. Even so, he continues to contribute as the family requested donations in lieu of flowers to the Commission. So far, the Commission has received two donations.

The Administrative Report, a summary of CRASC finances and correspondence, follows this report.

Respectfully submitted by: Janice Rowan, Executive Assistant

ADMINISTRATIVE REPORT
November 16, 2006

Report of the Financial Transactions of the Connecticut River Atlantic Salmon Commission for the Period from January 2, 2006 to November 7, 2006:

1. Commission Account Balance – January 6, 2006	\$ 1,350.24
2. Receipts	
Interest Earned:	\$ 1.13
3. Debits	
Subtotal:	\$ 0
4. Commission Account Balance – November 7, 2006	\$ 1,351.37

Report of Connecticut River Atlantic Salmon Commission Correspondence:

1. Commission Correspondence: IN

George H. Taylor. FERC. Order approving comprehensive canal Operations plan pursuant to Articles 406, 408 and Settlement Agreement [Holyoke canal flows]. January 11, 2006.

John V. O’Shea. ASMFC. Thanks for the letter of support re: shad stock assessment. February 10, 2006.

Hillary T. Berlin. FERC. Order granting extension of time of paragraph B [Shoreline Erosion Monitoring Plan]. February 14, 2006.

John Ragonese. Transcanada Hydro Northeast Inc. Copy of: Vernon Project, P-1904; Application [to FERC] for non-capacity amendment of license. February 27, 2006.

Magalie R. Salas. FERC. Notice of application for amendment of license and soliciting comments, motions to intervene, and protests [Comprehensive recreation and land management plan - Holyoke Hydroelectric Project]. May 2, 2006.

John Ragonese. Transcanada Hydro Northeast Inc. CFD Modeling report investigating discharge of proposed four new units [Vernon]. May 3, 2006.

John K. Novak. FERC. Order granting extension of time under Article 410 [to file American eel flow prioritization plan at Holyoke]. May 9, 2006.

George H. Taylor. FERC. Order approving plan for permanent upstream eel passage under Article 412 [Holyoke]. May 10, 2006.

George H. Taylor. FERC. Order modifying and approving upstream fish passage monitoring plan under June 24, 2004 and April, 19, 2005 orders [Holyoke]. May 19, 2006.

John E. Estep. FERC. Order amending comprehensive recreation and land management plan under Article 418 [Bachelor Brook/Stony Brook conservation restriction]. June 20, 2006.

George H. Taylor. FERC. Order approving comprehensive operation and flow plan under amended article 406 [Holyoke]. August 15, 2006.

William Guey-Lee. FERC. Order granting extension to file revised Exhibit G drawings [for Holyoke recreation and land management plan]. September 1, 2006.

George H. Taylor. FERC. Order approving upstream fish passage plan under amended Article 411 and approving as-built Exhibit F drawings [Holyoke]. September 7, 2006.

Mohamad Fayyad. FERC. Order amending license [to upgrade water wheels at Comerford Development]. October 12, 2006.

John K. Novak. FERC. Order granting extension of time for continued run-of-river modification study under Article 405 [Holyoke – 2-year extension]. October 20, 2006.

George H. Taylor. FERC. Order approving plan to enhance downstream fish passage facilities under Article 410 [Holyoke – shortnose sturgeon passage study]. October 24, 2006.

William Guey-Lee. FERC. Order amending shoreline erosion remediation plan [Holyoke]. November 2, 2006.

William Guey-Lee. FERC. Order granting extension of time to file Exhibit F drawings [Holyoke upstream passage]. November 3, 2006.

2 . Commission Correspondence: OUT

None to report.

**REPORT OF THE TECHNICAL COMMITTEE CHAIR
FOR THE NOVEMBER 16, 2006 CRASC MEETING**

Genetics Research

Use of genetically marked families as a monitoring and management tool continues. Sea-run returns are individually genotyped. This information allows mating to prevent loss of genetic variability and the production of known, “genetically marked” families. Research by staff at the USGS-Conte Anadromous Fish Research Center has shown that parents and families can be accurately assigned to fish captured in the river, based on an analysis of emigrating smolts. Further analysis of samples from smolts and returning adults should yield conclusions about which regions within the CT River basin are most productive.

Fish Culture

5.8M fry and almost 70,000 smolts were stocked in 2006. Half of the smolts were stocked into the Farmington River and the remainder in the mainstem Connecticut River in Massachusetts.

The egg production projection for this year is 10.9 million green eggs. Staff at the Richard Cronin NSS have completed sea run spawning taking about 887,000 eggs.

The balance will be from domestic broodstock. Spawning is underway at the White River NFH, the Roger Reed SFH, and the Kensington Salmon Station. Kelt spawning is underway at the North Attleboro NFH. Spawning is nearly complete at the RRSFH (~1.8M eggs). Only about 0.5M eggs were shipped to the WRNFH this year because both chiller and incubation capacity have been increased at this site. Incubation facilities at the KSSH (2M eggs) are full and future production will be shipped to the WRNFH.

Milt from 41 sea-run males was cryogenically preserved at the Richard Cronin NSS with help from the Northeast Fishery Center and materials from the Pittsford NFH. Motility ranged from 25-85%. This study will help to confirm protocols for milt preservation and provide insight into production level milt preservation. The study will also address kelt and domestic milt from the NANFH and the WRNFH as a comparison.

Mr. Rocco Cipriano, USGS-Leetown Science Center, and staff from the Western Massachusetts Center for Sustainable Aquaculture are continuing the antibiotics research on domestic salmon at the Richard Cronin NSS. This study compares the use of oxolinic acid, florfenicol, and oxytetracycline.

A cadre of volunteers assisted the staff at the Pittsford NFH in vaccinating and marking pre-smolts. The fish were large, of consistent size, and appeared to be of high quality.

Mr. Bill Archambault reported that salmon production is underway at the Berkshire hatchery in Great Barrington, MA under the direction of a USFWS volunteer group. The production goal is 25,000 2-year smolts. The Smolt Advisory Committee will meet at the Berkshire hatchery this winter to review the operation and view the fish.

Genetics

The Subcommittee met on September 5, 2006. They agreed to manage the sea-run returns as a single population regardless of origin (fry or smolt). Spawning plans for this season were reviewed and spawning was carried out much the same as the last several years.

Only nine regional family batches were created for this year's fry stocking, thus eliminating the region above the high dams. Fry will still be stocked above the high dams, they just won't be genetically marked this year.

Salmon Studies

14 sea-run Atlantic salmon were radio-tagged and released above the Holyoke dam as part of the annual Deerfield River Fish Passage Study. Two of these fish were never detected in any tributary. One salmon was located in the Mill River-Hatfield (MA). Seven salmon were documented in the Deerfield River with five salmon reaching the #2 dam, exceeding the 4 fish trigger number for upstream fish passage. This is the second year in a row that the trigger has been met- so now the committee must now determine if we wish to pursue upstream passage at Deerfield #2. Four salmon passed the Vernon dam. Of these, three were found in the West River at the Townshend dam though none were successfully trapped. Another hovered around the Bellows Falls dam and fishway but ultimately made its way to the Cold River which is the first tributary downstream of that dam. It stayed there for 10 days and then left.

Preliminary assessments this summer's stream parr growth and survival work indicate that most sites looked good with variability at some sites in each state likely related to high flows at or just after stocking. Vermont experienced reduced stock densities for 0+ salmon but good parr numbers and likely a good smolt estimate overall.

Fish Passage

Holyoke – Connecticut R.

- 2006 Fish Passage Season went well (second season with new facilities).
- New crowder system & operation protocol at shad transport system worked well.
- Downstream passage investigations ongoing – sturgeon tagging/lab testing.

The Holyoke license required HG&E to assess resident fish passage all summer. Sampling continued after the migratory fish season 2 days per week. The facility passed

1,500 fish. Smallmouth bass, white sucker and American eels were among the species passed. The first Atlantic sturgeon ever lifted at Holyoke was documented on August 31, 2006.

Another 2,000 fish passed downstream including eels, bluegill, channel catfish and spot tail shiners.

Turners Falls– Connecticut R.

- Project sold by NU to Energy Capital Partners out of New Jersey
 - Staff to remain the same
- Plans for new Gatehouse entrance are in revision - due mid-November
- Construction is still set for 2007

Fifteen Mile Falls – Connecticut R.

- Moore bypass sampler was modified and tested
- Modifications appear to have improved passage but smolt passage continued late (June)
- Awaiting results report
- Further consultation needed on next steps needed with TransCanada

Woronoco – Westfield River

- Smolt bypass study report completed – not conclusive
- Study in 2008 coincident with similar study at Westfield Paper Dam (same owner)
- Eelway now under construction

Deerfield River Project – Deerfield R.

- “Final” downstream fish passage plan under review

Fiske Mill - Ashuelot R.

- Denil ladder under construction
- Construction going very slow – FERC has applied pressure
- Target for completion still spring but may be later

West Swanzey/Homestead Woolen Mill Dam – Ashuelot R.

- Owner actively pursuing removal
- Stabilization of historic covered bridge still being worked on
- Removal targeted for 2007 though could slip to 2008

Brockway Mills – Williams R.

- Temporary downstream passage is in place and working
- Permanent passage is planned with construction expected next summer

Research – USGS-BRD-CAFRC

- Studies using a nature-like fishway were conducted in the flume
- These can pass shad with some accommodations
- Plan to test the fishway again in spring with shad, striped bass, suckers, and etc.

Bronson Brook Culvert Replacements – Worthington, MA

- One culvert replacement is almost completed and the other has been initiated

Culvert Project – Mill River-Hatfield, MA

- Additional funds have been provided for this project after it was determined that the E. Burke dam removal project was fully funded

Cold River Habitat Restoration – NH

- This stretch was badly damaged during the October floods in 2005
- Fourteen miles of stream have been surveyed with priorities identified
- Work will begin in the Warren Brook

Sandy Brook Culvert Project – FRWA

- Funded by USFWS
- Premier Atlantic salmon stream
- Project addressed shallow flow across a bridge apron and a downstream lip
- Flow directed to an 8 foot section of the apron, installed substrate on the apron reducing stream velocity, and backed water up to the lip with a rock ramp downstream to eliminate the jump

Rainbow Fishway Rehabilitation – Farmington River

- Engineering alternatives analysis nearly completed
- Next step is to choose the new design

Leesville Fishway – Salmon River

- Fishway closed this fall
- Issues with the upstream ice control structure have caused problems with the boards which may be tough to re-install next spring

Ballou Dam Project – Yokum Brook Becket, MA

- Project stalled while funding was found to install fire suppression tanks – this has now been completed
- The rest of the project will follow now that the tanks are in place

Shad Studies

About 1,400 shad were transferred in 2006. The CTDEP, NHFG, USFWS, MEDMR and USGS made intra- and interbasin transfers for restoration and research. Survival was generally good though loss in some loads was heavy possibly because of density in the lift and delays in loading. Shorter lift intervals helped. could be documented when biological samples are taken from the shad at Holyoke.

Ms. Rowan thanked Mr. Steve Garabedian and Mr. Haro for their support in repairing the USFWS shad truck. The USFWS supplied the parts and materials and Mr. Phil Rocasah repaired the gate so that the truck would be ready to haul shad next season.

New England Joint Venture

After observing that competition for Congressional funding among river programs was confusing and unproductive, the New England Salmon Restoration and Recovery Program directors have agreed to educate Congress in as a unified voice with respect to needs. Hatchery production, program evaluation and habitat restoration were identified as common needs. A subgroup (Gephard, Colligan, McKeon, and Keliher) is developing a five-year research plan to address hatchery production needs and program evaluation needs. Mr. Gephard is developing the Connecticut River-specific portion of this package. Since significant levels of funding are available for habitat restoration, this need was eliminated from the package. The expectation is that the group will reach consensus on the final needs package in mid-December with an eye for visiting Washington, DC on February 2007.

Other Business

Refuge Re-Location

The staff from the Silvio Conte National Fish and Wildlife Refuge will be moving into the Coordinator's Office this month once remodeling is completed. They will occupy the first floor where the Sunderland FRO was once housed.

Endangered and Threatened Species

As of October 17, NOAA revised the list of species of concern to include alewife and blueback herring. The list of candidate species now includes Atlantic sturgeon and Atlantic salmon populations in Maine outside the range of the listed DPS.

Fish Contaminants

The USEPA has completed and released its contaminants report: *Connecticut River Fish Tissue Contaminant Study (2000): Ecological and Human Health Risk Screening*. The report is available at: www.epa.gov/ne/lab/reportsdocuments/ctriverftr2000/index/html

CRASC Meeting Attendance

Attendees

Wayne MacCallum
Martha Naley
Bill Archambault
Peter Basta
Jay McMenemy
Robert A. Jones
Stephen Gephard
Thomas D. Menard
Caleb Slater
Steve Garabedian
Lee Perry

Audience

Jim Carroll
Gabe Gries
Alisa Shull
Nathan Goodman
Michael Masnik
William Binikour
Darleen Cutting
Larry Lofton
Bob Stira
Steve Rideout

Affiliation

Mass Div. of Fish & Wildlife
U.S. Fish & Wildlife Service
U.S. Fish & Wildlife Service
VT Public Sector Rep.
VTFW
CT Public Sector Rep.
CT DEP / Inland Fisheries Division
CRASC Mass Public Sector Rep.
MA DFW / CRASC Tech. Comm.
CAFRL-USGS
NHFG

CT River Salmon Association
NHFG
U.S. Fish & Wildlife Service
U.S. Nuclear Regulatory Commission
USNRC
Argonne National Laboratory
U.S. Fish & Wildlife Service
U.S. Fish & Wildlife Service
NE Energy Service
FWS/USGS Retired