

**CRASC Technical Committee
Meeting Minutes
January 24, 2012**

Agenda Item

1) Call to order, approval of Minutes

Chair Caleb Slater started the meeting at 9:50 a.m., all agency members were present, with Mr. Bill McDavitt representing NMFS. A motion to approve the Minutes of the September 23, 2011 was made and seconded, all were in favor.

2) Technical Committee reorganization of Subcommittees

Mr. Gephard provided a handout that outlined the CRASC hierarchy down from the Commission to a level of 9 proposed subcommittees (Attachment A). Mr. Gephard noted there had been discussion among some members on this approach in the past and that he had developed the framework with CRASC Chair Bill Hyatt. Two current subcommittees, Smolt and Genetics would be merged into the single Salmon Subcommittee. New subcommittees include Sturgeon, American eel, River herring, Sea Lamprey, and Habitat. Remaining existing subcommittees include Fish passage, Fish Culture, Shad, and Salmon. There were some questions from the public regarding adding to the “mandate” of the CRASC legislation. Mr. Gephard and Chair Slater responded that CRASC has always been interested and concerned with diadromous fishes from an ecological view, the full suite of species, and how they interact in the context of the larger ecosystem. We cannot and will not ignore these species. It was noted that there would be a desire to include non-government organizations in the Habitat Subcommittee (e.g. Watershed Council, American Rivers, etc.). A question on approval was raised. Mr. Sprankle responded that CRASC wording made no specific mention of such an action requiring approval, but all agreed the Tech would notify the Commissioners of this step and seek their approval at their next meeting. A motion to approve framework was made, seconded, all in favor.

3) Fish Culture Subcommittee

Mr. Dan Marchant provided a handout which outlined Atlantic salmon egg production by facility. A total of 4.94 million green eggs were taken in the fall. He provide updates by facility including Richard Cronin which is rearing 100,000 fed fry at this date and also reconditioning 38 kelts. Dwight Eisenhower NFH is expected to stock out 73,000 smolts in late March. The fin assessment study for smolts is scheduled for late February. Kensington Hatchery (CTDEEP) produced 1.8 million eggs, of 544K were shipped to Roxbury Hatchery (VTFW). Approximately 376K eggs from Richard Cronin were shipped to Kensington Hatchery. Roger Reed Hatchery (MADFW) produced 1.4M eggs and received 1.2M from White River NFH. The shark jaw study that had been underway at White River was ended with its shut down and the status of study fish at Lamar (USFWS) needs to be clarified. Mr. Marchant will be checking on the status of this study. Mickey Novak acknowledged an extensive amount of support he received from Roger Reed staff, his volunteers, Conte Refuge and others in dealing with his station alone from the early fall through today’s meeting, due to an employee’s health situation.

4) Fish Passage Subcommittee

Mr. John Warner noted that relicensing process of five main stem hydropower operations will begin this year, in advance of their 2018 license expirations (FirstLight Power and TransCanada). He outlined the FERC process which has many set time frames and deadlines. For CRASC concerns will center on operational concerns, fish passage up/down, and flows/habitat. Other concerns include things like river bank erosion and water quality. Federal agencies have power regarding fish passage prescriptions and federal endangered species but states will cover water quality certificates, which will be required. Dr. Castro-Santos asked about cumulative effects for the projects and how that will be considered. Mr. Warner noted that is an obvious concern and we will need to make linkages and cases for such, need data, current shad study is an example. A public member asked about shortnose sturgeon in the Turners Falls bypass reach and how as an endangered species it is imperiled by current dam operations. Mr. Warner replied this species is handled by National Marine Fisheries Service (lead), and they have prescribed minimum flows. More research will be discussed and used. Mr. Sprankle noted that Dr. Kynard has 17+ years of data which he will be publishing soon, agencies will use these data to determine flow regimes to address sturgeon. We must have the data and it must be scientifically sound, stand up to criticism.

Mr. Gephard asked what role CRASC may have in this given existing state and federal agency involvement. Mr. Warner replied the CRASC could easily write to intervene and the CRASC may have some different takes on some items or have some new items. He thought it would be good and could occur now or up to the point before license issuance in terms of being able to provide comments. Mr. Gephard noted that CT may not be directly linked to this but has clear interest in many fisheries issues, CRASC can be the vehicle to ensure concerns are addressed. Mr. Warner agreed good approach.

ACTION ITEM – It was agreed that at the next CRASC meeting they be advised the Tech recommends a letter requesting intervenor status in the FERC proceedings to allow CRASC concerns to be voiced and addressed.

Mr. Warner continued with an outline of a fall meeting where fishway inspections and monitoring was discussed. The agencies intention is to develop and implement a more structured and rigorous review of fishway ops to minimize occurrence of issues and have issues addressed in a timely manner. The goal to ensure design criteria for flows and gates etc, are in operation to maximize passage efficiency.

Mr. Warner provided a handout that outlined fish passage items from the lower to upper basin. Highlights include an incline screen and insert for the downstream passage weir. At Turners Falls, the pursuit of installing a fish lift at Cabot Station has been abandoned. Shad passage in the canal will be covered by Ted later. Issues in lower Vernon Dam fish ladder were identified and have been mostly addressed, with plans to finalize last measure before fish passage season – wooden/missing weirs replaced (with metal) and access to lower fishway for inspections being installed. A public member asked how long the issues at Vernon may have been impacting the ladder. The answer was its not clear as access was restricted (being resolved) and visual

inspections were limited as a result. Mr. Warner noted the planned pre-season inspections are to help address this.

5) Genetics Subcommittee

Mr. Gephard noted that Dr. Meredith Bartron (USFWS) had provided a one page written update on the status of the Atlantic Salmon Marking Program Study. Her lab has processed a total of 4,236 samples (hatchery parents/fry/wild smolts/adult sea-run returns), in year 1. Year 2 is set to be partially funded again by VTDFW through a State Wildlife Grant. She will be sending year 1 results to Dr. Ben Letcher at Conte who should be able to provide a report in May. Dr. Bill Ardren asked Ben if he could have preliminary results earlier. Dr. Letcher replied he could have something to the group by mid March for its use in fry stocking considerations. Dr Ardren asked how many samples were from the field vs. hatchery samples/verification. Dr. Letcher replied about 80% were from in-river field samples.

6) Shad Studies Subcommittee

Mr. Ken Sprankle reviewed a handout he provided on select preliminary results from the lower river portion of the shad movement and survival study. Highlights included a total of 92 shad tagged at river mouth, 82 received both radio and PIT tags, 10 fish were only PIT tagged. The 92 study fish were provided by CTDEEP (n=15) and USFWS (n=67). All fish were tagged by USFWS. Following determination of the viable study sample size (fish that were detected at up river receiver sites – account for fall backs) a total of 56 viable study fish were established out of 82 double tagged fish. From these, 35 were detected by PIT tag reader as passing at Holyoke Fish Lift – or 63% of the total. These fish were further examined for time of tag and release vs. time of detected passage – mean was 17 days, with range of 6 – 35 d. Other statistics and figures were discussed along with study design (receiver locations) and objectives.

Dr. Castro Santos picked up with details on radio tag receiver data filtering and analyses. His slide presentation showed fish moving rapidly from the river mouth to the Holyoke Dam were they were delayed. However, as noted, a fairly high % did eventually pass. He continued to present other data for upper river sites including Turners Falls Canal. Radio/Pit tagged fish were released at river mouth (N=82) at Holyoke Dam (N=70) and into the Turners Falls Canal (N=120). His presentation showed performance of these tagged fish at fish ladders and dams at Turner Falls Dam, its Gatehouse Ladder, and upstream at Vernon Dam. Shad passage rates out of the Turners Falls Canal was consistent with 2010 rates (~50%).

A public member remarked that shad passage counts out of Gatehouse were the same as last year despite a near 100,000 increase in the number of shad passed at Holyoke Fish Lift. Dr Castro Santos noted that simply looking at numbers in this way is not meaningful in the context of passage questions. The logical question is how many fish were available to be passed from having entered the Canal to accurately speak to the question of shad passage.

In spite of Holyoke passing 100,000 more shad in 2011, the number entering the Turners Canal via Cabot Ladder (27K), was consistent with 2010 (30K), as a result the shad passage rate out of the canal was very consistent with 2010. It had been suggested that 2010 shad passage out of the

canal was due to NMPS shut down in 2010 – existing tag fish data strongly suggests this was not the case but rather the significant modification to the Gatehouse fishway entrances in place for the first year in 2010 – as supported by actual fish data from a robust sample size in that year and documented once again in 2011. This is noted as a substantial improvement from what has been observed in the past ten years but is still well below management goals for shad passage at Turners Falls Dam when viewed as a single main stem barrier (40-60% passage from downstream facility number). Dr. Castro Santos provided figures illustrating these data and results. He provided additional results with 40 radio tagged passing out of Gatehouse and into the Turners Falls Dam Pool. From these fish 36 (90%) reached Vernon Dam, moving generally in rapid motion to Vernon Dam receivers were they lingered for typically a week, none passed the ladder and attraction to the fish ladder was relatively low. More data and statistics were presented. However, this portion of the study clearly answered the question that fish are moving up to Vernon Dam - despite the near complete lack of recent passage (46 fish passed at Vernon in 2011 – 16,000 passing Gatehouse).

Public member questioned what happens to shad that pass into the canal, what is their fate? Dr. Castro- Santos noted with this new study underway we will be better able to quantify this topic. He noted there are concerns with shad surviving on their downstream movement – he suspects the evidence of delays from this year’s data and past years data are an important factor – fish not using downstream entrance structures. The data obtained in 2011 and coming study year will be applied to this question.

It was noted there were many challenges that needed to be overcome with the undertaking of this study and much work remains for analyses, with planning for 2012 implementation. It was noted there has been a wealth of important data gathered with preliminary results already answering many questions of management significance.

7) Connecticut River Watershed Council presentation on the use and benefits of developing a uniform biological metric scale for rating water quality in the four state basin.

Mr. Andy Fisk (Director CRWC) gave a verbal presentation on the value of using water quality standards to address issues and provide a mechanism for requiring action (enforceable). In quantifying biological criteria we can protect high quality waters and improve degraded ones. He stated CRWC is interested in pursuing the development of a coordinated standardization of biological metrics among the four states. He had EPA and USGS biologists present who stated their support for this. Mr. Fisk noted a recent main stem fish survey funded by EPA that could be used to help address fishes component for metrics. He wants to work with state and federal agencies on the development of this which he recognized would include agencies not a part of CRASC. However, he pointed out that the fisheries expertise of the CRASC members could provide critical data for diadromous fishes. He noted that importantly CRASC is already assembled/designed to look at the basin as a whole watershed. Mr. Gephard asked what he was looking for from CRASC. Mr. Fisk stated that he would like to come back to speak to the Commissioners pending Tech support and look to have Tech members spend maybe one day providing information to help fill in questions for these fishes. He stated that he is not looking for money from CRASC. He has talked with water quality agencies in the basin that are

different levels of advancement on this topic, primarily in smaller tributaries. Mr. Fisk noted a similar approach was completed in the upper Mississippi River. He would like to seek out needed agency support, then funding, using a contractor to pull all the information together so states can have a tool they can use on this. The EPA biologist stated his concurrence with this and the benefits to such an undertaking. There was some discussion by the Tech, with agreement this is a worthwhile proposal.

ACTION ITEM – Each state agency member is to contact their water quality agency contacts to inform them they have also been briefed on this proposal and will assist. This is to ensure many people needed on this are in communication. Andy Fisk will be notified and placed on the agenda for the next CRASC Commissioners meeting to get consideration of a formal approval.

Mr. Fisk noted this approach will require a public process as it becomes more developed and that the CRWC could also assist in that capacity.

Dr. Ben Letcher spoke up to introduce the new USGS UMASS/Coop Unit Fisheries Biologist, Dr. Allison Roy. She said hello and noted she has been here for only a week but looks forward to seeing where she can work with members.

ATTENDANCE

CRASC TECHNICAL COMMITTEE MEETING – JANUARY 24, 2012

NAME

AFFILIATION

Melissa Belcher	USGS /UMASS
John Ward	Gill Selectboard
Sheila Kelliher	USFWS/SCA
Dan Marchant	MADFW
Mickey Novak	USFWS/RCNSS
Henry Bouchard	USFWS/DDENFH
Bob Stira	FirstLite Power
John Truebe	Lakeside Engineering
Barry Parrish	USFWS/CONTE REFUGE
Jim Carroll	CRSA
Ben Letcher	USGS
Steve McCormick	USGS
Gabe Gries	NHFGD
Amy Singler	American River
Michael Sears	HDR
Jen Stone	USFWS/WSFR
Alex Haro	USGS
Andrew Fisk	CRWC

Andrea Donlon
Nick Grabbe
Karl Meyer
Dave Armstrong
Allison Roy
Ralph Abele
Dan McKinley
Tim Wildman
Steve Gephard
Lenny Gerardi
John Warner
Ken Sprankle
Caleb Slater
Bill Ardren
Ted Castro-Santos
Matt Carpenter
Bill McDavitt
Darleen Cutting
Steve McCormick

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Journalist
USGS/MA-RI Water Science Center
USGS/MA Cooperative F&W Unit
EPA/ New England
USDA/ Forest Service
CTDEEP
CT DEEP
VTFW
USFWS/NEFO
USFWS/CTRC
MAFW
USFW
USGS
NHFG
NMFS
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