



**CRASC Technical Committee
Meeting Minutes/Notes
June 10, 2015**

Agenda Item

1) Call to order, approval of Minutes (Caleb Slater)

Chair Caleb Slater started the meeting at 10:10 a.m. Members Bill Ardren (USFWS) and Dan McKinley (USFS) were unable to participate. Minutes of the November 3, 2014 meeting were reviewed and approved by vote.

2) Coordinator's Report (Ken Sprankle)

Mr. Sprankle referred to a handout report. Updates on fish passage counts were reviewed among facilities. Fish count data, most recent counts data available varied by dam/facility. The counts for Holyoke was noted as relative high, above 75th percentile for time series (1976-2014), salmon count was very low and sea lamprey although low was within the range of expected variability. American eel counts were noted as appearing relatively high and was a reflection of eel ramps/traps at Holyoke starting to capture good numbers of juvenile eels. Caleb Slater noted that the shad count at West Springfield was average for the time series. Bob Stira reported he had updates on shad counts for Cabot Ladder 37,000 and Spillway ladder 23,000 as the facility priority is Gatehouse counts (passed upstream of project). Refer to the report for more details on counts. Shad daily counts at Holyoke in relation to river discharge was reviewed, with a provided figure, as was the spring river water temperature profile. The river flow and water temperatures had a clear strong influence in the observed counts for shad as is typically shown. A review of other regional rivers fish passage counts was given, basically showing a consistent decrease in run numbers for river herring with the exception of the Gulf of Maine rivers, more details in handout. The following narrative is to suffice for the River Herring Subcommittee report. A review of the Coordinator's Office river herring population assessment work for the spring was provided; number of survey days, number of fish captured and processed in field, number taken to lab, number of otoliths/scales sets taken. Information on river herring capture and transfers in May was reviewed, with 2,770 fish moved this spring. A brief summary of the "River Herring Restoration Status and Plans in the Connecticut River Basin" and its rationale for development was given. The Plan is posted on the Coordinator's web site. It was noted a google maps data layer was expanded from CTDEEP's approach into the upper basin, providing an updated fish distribution and barrier/passage layer. Ben Gahagen provided an update of research activities that are occurring on a regional scale including a genetic study his agency is involved with to better define river stocks in marine sampling programs such as with bycatch monitoring. There is also a large scale river herring freshwater production study occurring led by Umass/Amherst, which is intended to also reduce information gaps. MA DMF is also continuing its river herring bycatch monitoring effort and working with Umass

Dartmouth on the voluntary river herring bycatch avoidance program. Many partners are involved in these various programs including NOAA.

3) Fish Passage Subcommittee (John Warner)

John Warner provided a handout with summary items. Some key highlights include the construction of downstream fish protection and bypass measures is staged to happen soon at Holyoke Dam (HGE). Brett Towler (USFWS) was at site day before, they are ahead of schedule. HGE has requested an earlier shutdown date of fish lifts to ensure construction work is done properly given potential unknowns with river conditions. HGE requested to shut lifts down June 22, earlier than planned. There was discussion among the committee, noting that we typically pass 95% of the run by June 22 date (over long-term average) and we have very strong run this year >75th percentile. Given this information and desire by the committee to see this construction project be successful, it was agreed to allow the June 22 fish lift closure – noting that this is a special situation, and does not reflect an agency belief that late season fish passage is not important.

John reviewed the status of numerous relicensing studies, mostly focusing on the adult shad radio tagging studies and the challenges of the agency water release treatments at the Turners Falls Dam and power stations in varying levels. The agencies have had to work with the consultants to respond to flow changes and best shifts in water release treatments to provide a variety of conditions for the tagged fish to respond to. Other work noted was sea lamprey radio tagging studies and eel collections/sampling plans for these studies. On a separate note, John discussed the Manhan River fish ladder which had some more adjustments made this spring by Brett Towler and a new SalmonSoft monitoring system has been set up, lighting for night counts was initially problematic.

Brett Towler provided additional verbal updates on his spring main stem fishway inspections (pre-season) at Vernon, Turners Falls, Holyoke and on the Westfield River at West Springfield. His inspection reports were written up and no major issues were noted. Bill McDavitt asked if these reports are filed with FERC. Answer no, but they could be. Brett and others have discussed - seemed like a very good idea. Also – these inspections could be requested as a future license condition perhaps – seems very logical and beneficial to our efforts.

4) Shad Subcommittee (Sprinkle)

Ken referred the committee to an updated draft copy of the Shad Status Report only in their folders. He reviewed the most recent edits, it was agreed that the members would review one last time by the coming Friday and provide him with any final edits. The committee agreed the Report would be presented for approval at 6/15/15 Commission meeting. Tom Savoy (CTDEEP) had some concern about report content and options to address items that may not have full consensus. Bill Hyatt (CTDEEP attending) noted that the report was an important opportunity to bring current information to the Commission that would serve for the more impactful Management Plan revision that is planned. The

Report was intended to provide information and focus to areas and highlight things. He stated he wanted the Report to move forward and be brought to the Commission at upcoming meeting for approval.

An update on several research projects followed starting with the NOAA shad fecundity study being led by Dr. Rich McBride. Jason Bouchard (NOAA) gave a verbal update, noting the proposed field work is going as planned, with good cooperation among the agencies, power companies, and the consultants. They have attained all desired sample targets as of this date, some schedule modifications occurred, and they are starting sampling for downrunners at this time. The early noted HE request and approval for closure of the lifts on June 22 will not impact this study, due to the timing of this year's run.

Dr. Steve McCormick gave a verbal update for Conte Shad Study; prior to the meeting he led the group on a tour of the laboratory spawning evaluations underway at the lab. He noted that both the lab and field components of the first year of the study are going very well; there are two more years of work that will focus on other objectives. Year one is determining spawning success between Holyoke Lift fish and Cabot Station trap fish, also a respirometer has been set up in the lab and fat measure of fish in the field has occurred with consultant radio tagging and with other sampling events.

Bill McDavitt provided an update on the NOAA Shad Population modeling effort that is being developed by a post doc hired in the winter (Dr. Dan Stitch). Dan and NOAA have held meetings to define available data and data sources and develop a model structure format and outline. More meeting will be held this summer to discuss progress. The model is individual based for freshwater (adults) and will use probability distributions for various migration and life history events tied in with timing of events, that will affect spawning, extent of upstream distance, survival (based on finite energy reserves) and also tied in with environmental parameters (temps/discharge). Passage parameters will consider effects of different levels of delay/timing on outputs for both upstream and downstream passage at facilities. Ken noted that as part of the effort CRASC must update its Shad Management Plan.

5) Salmon Subcommittee (Steve Gephard)

Steve Gephard provided a verbal update on CTDEEP fry stocking, with 391,000 fry stocked this spring in the Farmington River and tribs (269K) and in the Salmon River and tribs (121K). They had much better eye-up rates this season that resulted in greater number of fry than expected. Dr. Castro-Santos provided an update on his temporary use of sea-run adult salmon from HFL. He noted due to very low adult returns, the data he is seeking to obtain on swimming performance will be impacted by small sample sizes. He has used 7 fish and all fish are held no longer than 48hrs before being released in the main stem at downstream area of the Conte Lab. Ted asked for some help in best ways to hold these fish for the short time period and Steve said he would talk to him afterwards on that. Ted noted that some of the salmon had injuries around snout/head and he was concerned. Steve noted that sometimes the traps have parts that may shift and be fish hazards. Brett noted that he does include the traps in his inspections and looks for hazards to fish. It was thought that perhaps some new guidance on handling of fish may improve things for next year as Ted hopes to continue work in 2016 and 2017 if approved.

6) Sturgeon Subcommittee (Micah Kieffer)

Micah Kieffer started with an introduction to the charge given to the subcommittee by the Commission. He reviewed sources of information he obtained or discussed with others. He provided a handout and reviewed a list of information needs to consider moving forward on any potential hatchery based restoration effort. He highlighted the many challenges to that and asked Tom Savoy (CTDEEP) to speak on the matter. Tom noted many challenges but also pending data he is preparing to develop in reports. He has sampled 50 young Atl sturgeon of a size he believes is too small to migrate from natal areas (the closest known being Hudson River). He described how he has encountered these juveniles without targeting them and yet obtained a sized sample that was all sampled for tissues to determine genetic origin/relation. Since this life stage is difficult to sample for even when targeting them, it was suggested that creates the impression of some level of abundance. It was agreed by all that this information is new and the results of the genetic testing will have important management consequences, one way or another. Tom has not been able to conduct any surveys to target early juvenile life stages and funding is not readily available. Tom next noted his thought that there is likely shortnose sturgeon spawning downstream of Holyoke Dam. Bill McDavitt asked about upstream fish passage in future for sturgeon. Caleb noted that NOAA and MADFW will determine that and he expects upstream passage season to be year-round, whenever sturgeon may be seeking to move upstream, with the exception of winter and winter conditions. Micah noted that he has set out several acoustic receivers two below Holyoke Dam and one in Agawam area. He was able to get six acoustic tags implanted on late-stage prespawn shortnose sampled in the Agawam reach. Steve Gephard asked if Tom had ever sampled any other sturgeon species and Tom noted once collecting a green sturgeon (west coast species). That fish was re-released.

7) American Eel Subcommittee

Steve Gephard noted that chair Tim Wildman could not be there and that group had not met. Steve was asked about CTDEEP glass eel monitoring near mouth and that was reported as “low.” The group discussed the plan for both TransCanada and FirstLight Power to obtain silver eels from Newfoundland Canada at end of summer. The fish agencies for Vermont, New Hampshire and Massachusetts have been working to develop steps and plans that would allow these fish to be used to satisfy the large sample size needs for FERC studies this fall. At moment it is expected that the importations will occur with adoption of required steps and fish health tests/results. Lael Will noted she has submitted a State Wildlife Grant proposal to her VTDFW agency to survey for American eels. Ken suggested a coordinated effort be adopted by NHFG and his office for MA that would make the data and analyses consistent. CTDEEP has been doing this work and should be include in sampling design considerations and metrics of interest.

8) Sea Lamprey Subcommittee

Chair Melissa Grader could not be present but it was noted she had held a meeting the fall. More work was complete on the Draft Management Plan, but it is not final. Caleb Slater noted reports of more juvenile sea lamprey on shad this year by anglers. Steve Gephard explained that his information suggests in low flow falls, the “transformer” sea lamprey migrate more in the spring, as was the case last fall and observed this spring. It is not clear where the small lamprey are becoming attached; likely lower river and then finding themselves back upriver on the shad and herring.

9) Habitat

Steve Gephard noted that this subcommittee had not met. The group discussed updates verbally and included: the removal of the Fall River Dam (Gill/Greenfield MA) in December 2014; removal of Karp Family Dam (Suffield CT) in January 2015; a new fishladder in Essex CT on the Fall River; the planned removal of Ed Bills Dam (Lyme CT); and the planned removal of Norton Mill Dam (Salmon River CT).

10) Other Business

Ken Sprankle gave a brief review of the March CRASC Tech Research Forum, 11 platform presentations given and approximately 60-65 attendees at the new MA Div of Fish and Wildlife HQ.

Ken gave a brief update that the Cronin formerly known as Salmon Station is under new leadership with Dr. Dave Perkins the new Project Leader. Dave is arranging partnerships with UMASS, TNC, MADFW, and USGS to address a variety of things from freshwater mussels to fish research in a laboratory or other controlled environments (raceways).

Ken stated the USFWS Tech member Bill Ardren has not been able to make recent meetings and is less engaged on topics of CRASC importance as part of his normal duties (Lake Champlain Office). USFWS has internally discussed the benefit value of making me the USFWS Tech member in addition to my duties as Secretary. Ken is interested in doing this and sees himself always engaged in all areas of the Tech anyway. It seems logical to Ken/USFWS, and there is no CRASC language to preclude this option. The Tech members did not voice any concerns on this proposed change.