Agenda Items:

1. **Determination of Quorum, Approval of Today’s Agenda & Minutes of the June 26, 2013 Meeting.**

Chair Mr. Bill Hyatt called the meeting to order at 10:15 a.m.

Mr. Hyatt opened the meeting, and the Commissioners and staff introduce themselves followed by the general audience.

The minutes of the last CRASC meeting on June 26, 2013 were reviewed. A motion to accept the minutes from that meeting was made by Mr. Normandeau, seconded by Mr. Palmer, all were in favor.

2. **Report of the Coordinator / Executive Assistant**

Mr. Sprankle provided a handout and reviewed his report, refer to attachment for details. An update and review of fish passage count data for the basin was given. Updated data from the June meeting included a few additional salmon returns, with the season total being 92 known fish. American shad numbers were stated to be fairly good given extremely low passage counts for other East Coast river basins. A review of select data time series counts for select species were reviewed. The improved rate of American shad passage from Turners Falls Gatehouse out of Vernon Dam ladder for American shad was shown in a figure for a second year. Mr. Sprankle reviewed a salmon stocking data by state, sub-basin, and life stage for 2013, following the last submissions of stocking records this summer (total of 1,856M fry and 99,523 age-2 smolts). Mr. Sprankle described two reports that were released from his office in September; Water temperature monitoring and diadromous fishes temperature concerns in the Connecticut River upstream and downstream of the Vernon Dam, Vernon, Vermont Fall 2009 through Fall 2012 and Juvenile American shad assessment in the lower Vernon Dam Pool Fall of 2012. The reports describe these field study designs, data, analyses, results, discussion and management recommendations with numerous references to supporting peer reviewed literature and unaddressed concerns with Vermont Yankee’s thermal discharge.

Mr. Sprankle reported on the Shad and River Herring subcommittees, providing select summary data from the USFWS river herring assessment project initiated this spring. Summary data by species was presented in brief with much work set to occur. He noted the digital imaging system was installed in the summer and was used to age salmon scales and will be used to age the 919 sets of paired otolith and scale samples obtained from blueback herring, alewife and American shad this year. CTDEEP has taken the 501 blueback herring scale samples for cleaning and mounting. Reading will be conducted in collaboration with CTDEEP very soon. In addition, it was noted that mid summer boat electrofishing surveys in the Oxbow (Easthampton) documented a large number of juvenile shad and blueback herring (43% of alosids sampled were bluebacks) at the site of prespawn transfer releases.
The Northeast River Herring Team had recently met at the Regional Office of USFWS and highlights of the meeting were presented. Planned bycatch caps for shad and river herring will be in place for 2014 for the mackerel and Atlantic herring fisheries under both the Middle Atlantic and New England Fishery Management Council direction. States and USFWS reviewed information for respective programs. NOAA staff described plans to develop an expert task force to coordinate various conservation measures that are in partial effect. Mr. Sprankle asked Mr. Dan Morris to speak to NOAA recent decisions on these matters.

Mr. Dan Morris provided a thorough review, stating recent NOAA decisions to not provide 100% observer coverage proposed for sea herring, mackerel, squid and butterfish fisheries is largely due to lack of funds and ability to mix funds with other funding sources to provide this complete coverage. A ban on slippage (dumping nets before unloading them) was also not agreed to by NOAA and is related to safety concerns for boat operators. He stated NOAA and other are working on addressing observer coverage and it may be that gradual improvements will occur, for example 20% up to 80% etc.. He noted there is a clear and vocal lobby to protect forage fish and that many groups value these species.

Mr. Gephard voiced his concern that the “marine” managers and biologist working in freshwater habitats are disconnected in a communications sense. The two parties do not integrate well and that must change. He recommends that the agencies consider ways to improve this issue.

Mr. Sprankle reviewed some details regarding the Atlantic States Marine Fisheries Commissions requirement to have Shad Habitat Plans developed. A CT River Plan was developed with the basin agency partners and submitted by him. Reviews of all plans are set to occur in early December.

Mr. Sprankle reviewed data provide by CTDEEP on their Juvenile shad and herring seine survey. It was noted that 2013 juvenile shad catch rate at 3.41 was relatively low (27 years being higher out of 35 year data set). For blueback herring, the catch rate was 6.44 which was fairly good for recent years (only three years exceed this value in past 16 years). However, the herring value is low when taken in the context of the full time series, as earlier years values were generally much greater.

Mr. Hyatt asked if there was a motion to accept the report, which was made by Mr. Jones, seconded, and all were in favor.

3. **Report of the Technical Committee Chair and Subcommittee Reports**

Dr. Slater provided a handout summarizing information from the November 14, 2013, CRASC Technical meeting. The handout has been placed in its entirety below:

**Salmon Subcommittee (Gephard)**

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<td>Fry</td>
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<tr>
<td>Vermont*</td>
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<td><strong>TOTAL</strong></td>
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| Smolts* | 100,103 |

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*no future stockings planned

2013 Adult Returns
- Total 92
- 88 from fry, 4 from smolt
- Difficulty trucking from MA toward end of season
- 11 pre-spawning mortalities

2013 Spawning
- CTDEEP bought the hormones for injection
- MADFW & USFWS captured mature parr from the Sawmill River
- Planned to inject on 27 Sept. and take eggs 2 Oct. delayed due to Govt. shutdown
- 17 Oct. spawned all but 11 females, most eggs looked very good
- 17 Oct. remaining females injected then spawned on 23 Oct.
- No genetic program-crosses were random blind with each female split between two males
- 59 females, 19 males
- Egg take estimated at @400,000
- All adult salmon sacrificed for fish health testing
- No visible signs of disease
- Eggs will be held at RCNSS until fish health comes back
- Eggs will be sent to Kensington SFH if clean
- Kensington took @600,000 eggs from domestic broodstock
- No salmon spawning at Roger Reed - no broodstock salmon on station

2014 plans
- Searun fry: The Tech committee discussed the stocking of searun fry as a source of mature parr for spawning. It was decided that searun fry would be stocked in Pine Brook (CT) rather than the Sawmill River (MA).
- Availability of RCNSS to hold searun returns still unknown
- If RCNSS is available adult holding and spawning will proceed as in 2013
- If RCNSS is not available all returning salmon will be released to continue upstream
- Tech Committee agreed that basic data should be collected from all returning fish (length, weight, scale samples) and that some sort of tag or mark applied
- CT will stock fry in 2014, plan to be developed when eggs eye up
- Tech Committee discussed operation of upstream fishways (separate agenda item)

Status of Subcommittee
- It was decided that the salmon subcommittee would be populated with personnel from CT (the only state with a still active salmon program) the subcommittee chair would report to the Technical committee and reach out to other members of the Tech Com as necessary

American eel Subcommittee (Wildman)

Tim Wildman gave a report. The Subcommittee has not met so he gave a report of activities in CT tributaries.
- Mill Brook, 1st tributary to CTR, Partnership with Tributary Mill Conservancy Mix of glass and pigmented Typically 30,000 - 50,000 per year 2013 = no data yet, but early counts indicated that passage would be on the low end on the range
- Eightmile River, Lyme CT, Partnership with Eightmile Wild and Scenic, TU In-fishway video running SalmonSoft Tested this fall (test on-going) Counting out migrating silver eels Over 200 thus far. Most eels 12-14” (indicating male, but maybe some yellow eels searching for wintering habitat
• Eel passage project starting up on the Pattaconk River in Chester. Working with the town to install a ramp and trap at the first dam. Still need to come to an agreement with the landowners. The Pattaconk is a steep, heavily dammed river. Basically the headponds back-up water to the next dam. Because of this considering a trap and haul operation rather than an eel pass at each dam.

• StanChem eel pass, Mattabessett River (enters CTR in Middletown), Partnership with TNC and others New denil fish pass with SalmonSoft. New eel pass - modified Delaware style. No enumeration Eel passage was confirmed visually.

• Rainbow fishway, Interim eel passage provide when the fishway is closed Early July - late September Typically around 500 eels 2013 = around 100. Water supply was problematic causing periodic dewatering of the eel pass. Will resolve for 2014. Once the fishway is open for the fall, the Silver eel migration monitored at fishway window The migrations through the fishway is highly dependent on the generation schedule of power plant and the operation of the existing downstream fish passage This year due to work on the spillway the power plant did not generate at night AND the downstream fish passage was not operated- led to record count surpassing 300. Mostly eels greater that 16” (female)

It was noted that Holyoke passed 14,000 elvers in 2013 which is less than half of the record 39,000 recorded in 2012, but is right in line with passage numbers since 2005.

The actions of the Atlantic States Marine Fisheries Commission were summarized: for 2014 states must:
• Increase the recreational and commercial minimum size for eels to 9 inches;
• Decrease the recreational bag limit from 50 eels per person per day to 25 eels per person per day;
• Prohibit the use of eel pots where the mesh is not at least ½ inch by ½ inch; and
• Prohibit the retention of eels from September 1 through December 31 if taken by any gear other than baited pots, rod and reel, and spears.

Fish Passage Subcommittee (Warner)

Mr. Warner provided a status report facility by facility.

Holyoke – Connecticut River
• HG&E has developed the 3rd new turbine intake rack and downstream bypass proposal and conducted CFD modeling on that proposal. FWS commented on plans and proposed an alternative lower level bypass design and post-construction modifications if performance was not adequate.
• Comments on post-construction monitoring are currently being prepared by NMFS and others.
• Agencies, TU, CRWC and HG&E agreed to a blend of the two bypass proposals and some other additional changes to the design and are awaiting new CFD modeling runs of the revised design.
• Meeting to review CFD modeling anticipated in December.
• Construction targeted to begin in 2014 with completion in 2015.

Connecticut River Relicensings
• We are now into year 2 of a 5-year relicensing process for the 5 projects (Turners Falls, Northfield Mountain, Vernon, Wilder, and Bellows Falls).

• TransCanada and FirstLight have filed Proposed Study Plans (PSP) based on input from interested parties and FERC. Interested parties participated in a series of meetings to review PSP’s with the applicants.

• Vermont Yankee shutdown has led to delays in finalizing the study plans as VY operation status will change river temperatures and may affect timing of some studies.

• FERC meetings on VY and study scheduling on November 25 and 26.

• Agencies and other parties participated in an Instream Flow Study site visit to scope out the study river reaches and habitat types for evaluation. This study was originally scheduled for 2013, but has been delayed until 2014.

• Early 2014 likely to be busy with consultation on final field study plan details.

Manhan River Dam – Manhan River
Construction of the fishway is almost complete and will be operable in spring 2014.

Habitat Subcommittee (Gephard)

Mr. Gephard (co-Chair) gave a verbal report and noted that this subcommittee has not yet met. It is his intention to call a first meeting this winter. Mr. Gephard began a review of habitat projects that are proposed, in progress, or that were recently completed in the State of Connecticut. Examples include the recently completed StanChem Fishway on the Mattabesett River, removal of Bristol Brass Dam on tributary of the Farmington River, and the Norton Pond Dam removal in Salmon River basin. He reviewed other proposed work plans with new round of Sandy Grant dollars. He requested each state provide a similar update. Mr. Sprankle repeated that the Manhan River fishway is nearly completed and will be operation in spring of 2014. He also noted the recently completed dam removal on Amethyst Brook (Pelham MA). Andrea Donlon gave an update on the Wiley and Russell dam removal (Green River) and options/issues for the second dam on the Green. She also provided an update on the Chickley River habitat restoration following Irene in the Deerfield River basin. Lastly, the Fall River dam removal is on hold as MA historic resources agency has elevated information request, greatly increasing project costs, slowing permitting for this abandoned, degraded dam, in a heavily wooded, inaccessible area of the Fall River.

The State of New Hampshire activities were reviewed by Mr. Carpenter. He discussed extensive work in the Nash Stream basin over the past 6 years mostly focused on brook trout population effects and benefits and broader habitat and ecological benefits. Other work includes culvert surveys and reinstalls on Indian Stream.

Lael Will updated on Vermont activities noting that there have been repeated efforts to work with VTrans to restore habitat damaged by post Irene instream work. This included two brooks in the West River.

Mr. Bill Hyatt noted that culvert replacement will be eligible for the next round of Sandy Grant money and that the eligible area for funding has been expanded. In Connecticut this is now state-wide opportunity not just coastal.

Other Business

The technical committee approved a request from the state of RI for 2,000 American shad from the Holyoke fish lift for out of basin restoration efforts. RI will be expected to truck an equal number of fish to the Vernon pool as mitigation.
Discussion on the Technical Committee report items -
Mr. Hyatt asked about the length of the data time for American eel passage at Holyoke Dam.

Dr. Slater answered that it is basically since 2005 due to trial and error in first few years of post relicensing period.

Mr. Wayne MacCallum asked about the VY closure and impacts to existing monitoring.

Mr. Sprankle answered that monitoring is part of NYPDES permit requirement and a change in the permit with potential near elimination of a discharge with closure would likely alter requirements (more so in companies opinion). Agencies see value in continued monitoring post closure but unclear what can be required at this time. Mr. Palmer stated value in the data but not at the point of determining future monitoring at this moment. Mr. MaCallum asked, so no action by CRASC is needed at this time on the matter of continued monitoring? Mr. Palmer replied, not at this time.

Mr. MacCallum asked about when a decision on the use of RCNSS to hold salmon for CTDEEP will be made for 2014 season and will CTDEEP be requesting use of facility. Mr. Hyatt stated that CTDEEP will submit a letter by January requesting use of facility. Mr. Archambault stated USFWS will accept requests up to mid January. Mr. MacCallum asked - so a request is pending for RCNSS? - there was general agreement.

Mr. Palmer stated he had questions on adult salmon releases and the lack of certainty with use of RCNSS. It may be that we will be releasing some or all adults up-river in 2014 and beyond. He had several points to make, first that the Salmon Subcommittee should not be limited to just CT staff due to changes in restoration fry stocking activities, all states need to be engaged with this group as adult fish will likely be released and there are questions on things like tagging, fish passage and data. Second, he questioned how do we value these adult fish, and suggested that in the past we released very few adults up-river (generally < 10 a year) but it now appears likely to have many more above Holyoke if they are not being taken to RCNSS for use as broodstock. If a large number of adult salmon are released up-river we will need to alert anglers to this, but what is our message? In the past we stressed that salmon should not be fished for. Would we stay with this message, or would we consider allowing a catch and release fishery for these fish for a recreational opportunity in these coming years of adult returns? Would we still want to radio-tag and track these fish? Third, even if RCNSS is used, perhaps there is value in not keeping every adult up to 100 fish, perhaps release some % during run to have fish in the wild. The CRASC should discuss these questions.

Mr. Hyatt agreed more discussion was warranted and Mr. Gephard stated the Salmon Subcommittee will request all states’ involvement for these basin-wide questions and he will ensure that occurs. Mr. Hyatt stated the subcommittee will be open to any agency members that wish to be on it and Mr. Palmer stated he would be interested in being involved in this discussion. Mr. Gephard noted CTDEEP has made plans to purchase Floy tags and will list the Coordinator’s phone number on the tags. Work on signs etc. would all need to be discussed, lots to cover and meeting can be planned for early January with decision by USFWS on RCNSS made by then. Mr. Archambault stated there is no federal protection for these fish and the states can decide how they would like to have them managed in their waters. Mr. MacCallum clarified that CRASC must decide how these fish are managed as management authority had been ceded to CRASC by the member agencies. Mr. Normandeau stated he has no strong opinion on how to manage the fish. Dr. Slater stated we should remember the expectation is 90-120 fish returning in total so to promote a fishery may be unadvisable. Mr. Palmer noted fish tend to aggregate in the upper
basin in certain areas, and a fair number have been caught by anglers in the past, so there is more to it than the numbers might suggest. He elaborated there may be more value from natural reproduction when there are more adults in the system, and the fact there is value in just knowing these fish are in their streams (for the public). Mr. MaCallum stated current MADFW rule is salmon must be released unharmed. Mr. Carroll stated doesn’t CRASC require a stamp if fishing were to occur. Mr. Hyatt stated CRASC has authority to issue a license.

Mr. Hyatt asked if there is a motion on this topic? There was a charge given instead to the Salmon Subcommittee to prioritize management options for returning adult salmon for 2014 and future years, with consideration of the value of these adults for broodstock, natural reproduction, research/data collection, and/or catch-and-release fishing opportunities. The subcommittee will report back on recommendations to achieve the highest value from these returning fish. There is not expected to be time for CRASC to convene again before spring 2014 so the Tech Report should be provided to CRASC via email for their consideration for possible approval, modification, and or discussion. This report is due by the end of January.

Mr. Archambault stated that USFWS will have a decision on RCNSS use to CTDEEP by early January to keep this process moving.

Mr. Ragonese requested CRASC discuss this matter on value as it has real management implications – he is interested in the management goal of these fish, he is concerned about downstream passage operations at his company’s dams. Are fry to be stocked or produced upstream from these proposals? If fish are radio tagged that would provide some assistance in some questions.

Mr. Gephard stated the Committee must follow-up with each state to determine their views on this.

Mr. Carroll stated that in CT the salmon in the classroom program is very large (thousands of students) and requires important consideration in this matter too.

There was a motion made to accept the Technical Committee report, seconded, and all were in favor.

4. Status update on Vermont Yankee

Mr. Sprankle gave a verbal report that VY owners announced planned facility shut down in December 2014. At this time, VY lawyers and State of Vermont lawyers are in private discussion regarding the many aspects of such a shut down. At a recent VY EAC meeting attended by Mr. Sprankle and others, the lead VY Environmental Biologist stated that VY intends to operate status quo regarding its existing permits and related requirements. The VY EAC was informed that the thermal discharge would be reduced by 98% after Dec 2014, for some period of time they would require river water for service purposes. There was discussion on existing aquatic biota monitoring, would it continue? Dr. Slater stated that they will continue required monitoring through next year, unclear after that, but if they are taking and discharging water, they will need a NYPDES permit from State of VT. The future NYDES permit can be a mechanism for future monitoring.
5. CRASC role in addressing fishway operations at Bellows Falls and Wilder dams – 2014 through relicensing and West River (VT) ACOE Townshend Dam Salmon Trap and Transport

There was discussion of the fact that in 2013, the agencies contacted TransCanada and requested that Bellows Falls fish ladder be operated once 500 sea lamprey passed Vernon Dam. TransCanada agreed to this request, although it was noted that upstream fish passage at both Bellows Falls and Wilder are only triggered by the presence of adult salmon. Past passage data on lamprey for Wilder dam is unclear. Mr. Eric Palmer stated the 500 lamprey trigger was arbitrarily set and it was observed that once it had been met at Vernon, as soon as Bellows was opened, lamprey were passed immediately. He stated his concern that 500 lamprey trigger may result in delays to lamprey at Bellows Falls. He noted Wilder is more complicated given our current information base and the existing requirement to only trigger operation of ladder for adult salmon. Mr. Hyatt asked whether 500 lamprey is an appropriate number for a trigger. It was noted that the Tech Committee’s Sea Lamprey Subcommittee was charged with discussing the appropriate number and reporting back for guidance. Dr. Slater noted we can ask for ladder operations for lamprey but it is not in any agreement. Mr. Ragonese stated that TransCanada is not saying “no” to operating ladders but there are studies planned as part of FERC relicensing, timing of these may be shifted because of VY. He stated that he is not saying no to operating the ladder(s) in 2014 and said the trigger number could be lower, if 300 is the right number let him know. He stated the “cost” for ladder operation was relatively speaking low, compared with downstream passage operations which he said was high.

Mr. Palmer noted that it is unclear what will happen with adult salmon in 2014, and thus ladder operations. Mr. Ragonese asked if radio tagging can be conducted on any upper basin passed adult salmon, question is on downstream operations need and whether fish are seeking downstream. Mr. Palmer stated he is not opposed to radio tagging adults but number could be wide ranging 1-80 perhaps, depending on release options/need. Mr. Gephard stated again how do we value these adult salmon? The adults may overwinter in tribs so the need for mainstem downstream operations may not be required, behavior can vary. Mr. Hyatt stated we must wait for RCNSS decision as that will effect this decision. Mr. Palmer stated no recommendation at this time and this should be taken up by the Salmon Subcommittee to discuss options.

Mr. Hyatt stated the following charge to the Salmon Studies Subcommittee and Technical Committee be added to the earlier one regarding how we value the adult salmon – how do we deal with downstream passage requirements and radio tagging approach for TransCanada, this additional question is also due back to CRASC by mid-January.

Mr. Ragonese stated the management goal of the adult salmon is important as he needs to determine if he must by radio tags, he understood that there are current uncertainties that will be resolved by the new year and he would appreciate guidance as soon as possible.

Mr. Gephard stated that CTDEEP would need a minimum of 100 fish for genetic purposes of their program.
Mr. Archambault restated that USFWS will consider the pending CTDEEP request for RCNSS and respond as soon as possible.

It was noted that the ACOE Salmon Trap at Townshend Dam must be advised of pending decisions to ensure they aware. It was noted that the State of Vermont must state their priority for adult salmon and that will inform decision on the matter of ACOE trap.

6. CRASC History, documentation of salmon program

Mr. Hyatt opened this discussion based upon earlier meetings, noted value in documenting the history of the effort. He stated there has been much written already in various forums on the program for different period in time. The Salmon Subcommittee could have a role in evaluating this material. Mr. MacCallum stated a need for a history, it will have utility in a number of ways, maybe a graduate student project, or a contract as options. He stated we need to identify a way to do this. He stated this is a logical role of the Coordinator. Mr. Hyatt stated that the Service could provide access to the many files in the Coordinator’s Office. Mr. MacCallum stated the how the Compact and CRASC came to existence are very important lessons, large effort to undertake and execute. Mr. Normandeau stated get some researcher to address this but the question is who pays? Mr. Hyatt stated that the Technical Committee and Coordinator could work on this. Mr. Gephard noted that the Yankee Salmon book, by Foster, documents much of early CRASC and program in fine detail, a good source to go to. Mr. MacCallum and members agreed on a charge to the Coordinator – come up with options on the approach of such a program history. Mr. Morris added that NOAA has a small grant program to address just such an effort – documenting historic activities in fisheries management etc., and that the individual awards are on the order of $12,000. Something that could be considered. Mr. McInnes stated that he would work with Mr. Sprankle on this charge.

Meeting adjourned at 12:35.

ATTENDANCE

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<tr>
<td>Glenn Normandeau</td>
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<tr>
<td>Stephen Gephard</td>
<td>CTDEEP/Inland Fisheries</td>
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<td>Jim Carroll</td>
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<td>Caleb Slater</td>
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