DEP Forecasts, FFMP Table Selection and River Habitat: The Case for Additional Transparency

Peter Kolesar and James Serio

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Our General Concern

- In our efforts to assure a healthy aquatic habitat in the upper Delaware, the fishing conservation community continually monitors river conditions and FFMP releases.
- The forecasts made by NYCDEP of Delaware reservoir inflows and diversions play a critical role in specifying conservation releases into the River.
- Streamflow forecasting is both science and art. Forecasts are variable and subject to uncertainty. Our analysis suggests that modest deviations in these forecasts can have a very significant impact on the conservation releases.
- Hence the Decree Parties and concerned stakeholders would benefit from increased understanding and transparency about how DEP forecasts of reservoir inflows and diversions are actually made and how accurate they have been.

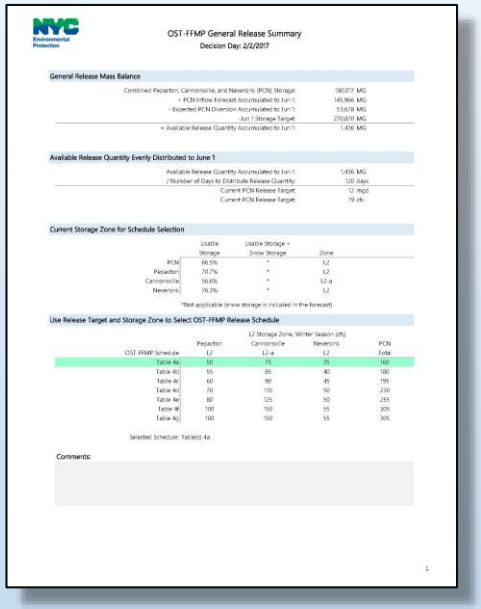
Our particular current concern
(Winter 2017, Releases into the West Branch).

- The latest FFMP/OST summary table, specifies conservation releases from FFMP Table A, which at 75cfs from Cannonsville, are low enough to imperil the redds where trout have already spawned, and the near shoreline habitat for critical invertebrates on which the trout depend.
- Our own calculations suggest that a modest increase of about 10% in the gap between estimated inflows and estimated diversions could justify increased conservation releases to great benefit to the habitat, without imperiling water supply for any of the Delaware stakeholders.
- Taking into account recent increases in reservoir storage and precipitation in the Catskills, might result in moving to a higher release table.

How the FFMP/OST Specifies Conservation Releases

- At unspecified time intervals, roughly monthly, NYC-DEP publishes its OST/FFMP Summary Tables, containing forecasts of inflows, and diversions over the remainder of the water year. By taking into account the current reservoir storage and the end-of-year reservoir storage target, DEP then estimates “water available” for release into the Delaware.
- Given the estimated water available, the season, and the actual storage relative to the FFMP rule curves, the FFMP specifies the release table and hence the conservation release from each reservoir.

The most current FFMP OST Summary (2/2/17)



OST-FFMP General Release Summary
Decision Day: 2/2/2017

General Release Mass Balance

Available Release Quantity Evenly Distributed to June 1

Current Storage Zone for Schedule Selection

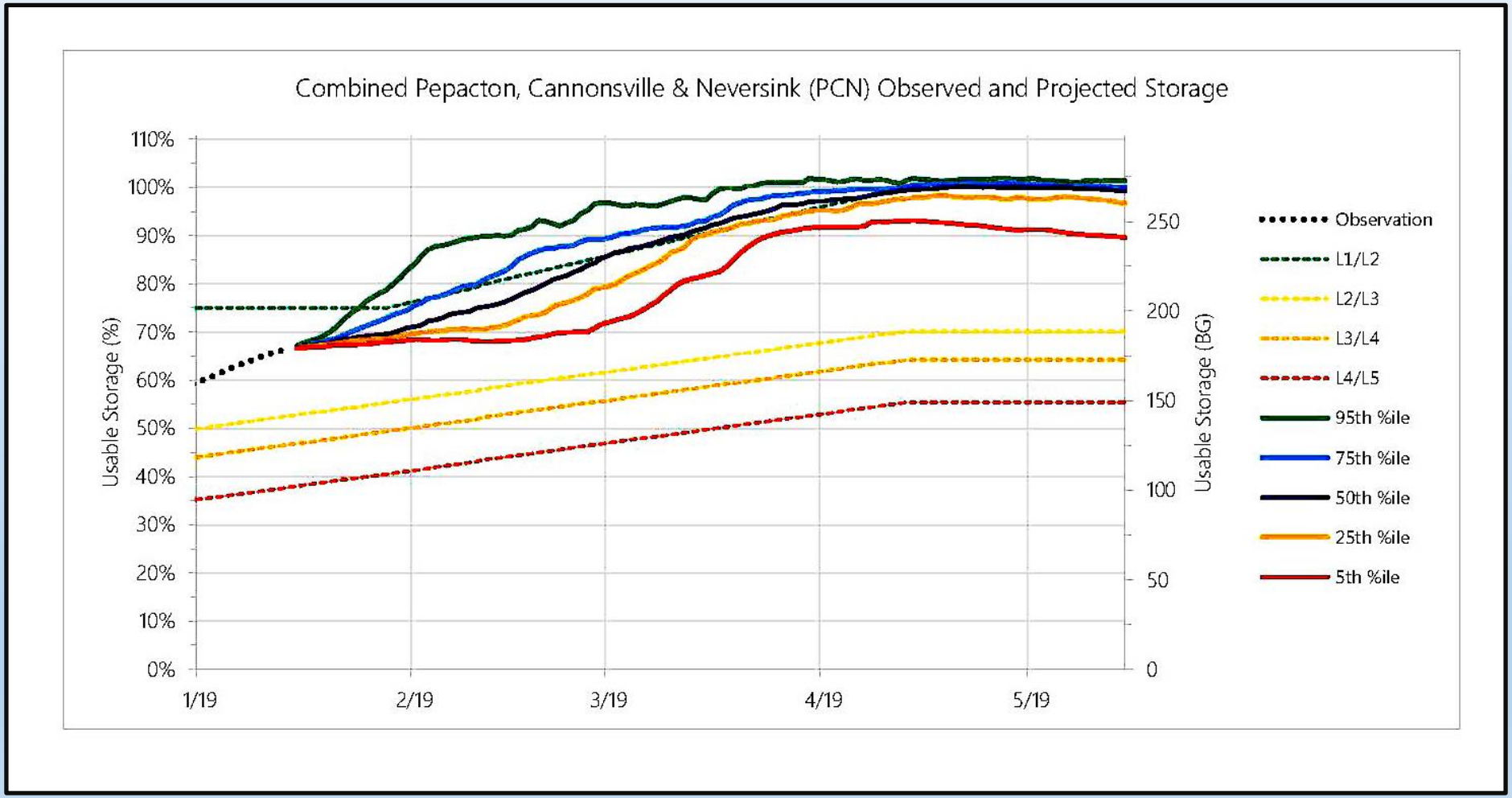
Use Release Target and Storage Zone to Select OST-FFMP Release Schedule

Comments:

Combined Storage	180,017
Inflow Forecast	145,966
Diversion Forecast	53,678
June 1 Storage Target	270,870
Water Available	1,436
Days Remaining to June 1	120
Release Target (mgd)	12
Release Target (cfs)	19
Storage Zone	L2

This puts the FFMP into Table a

The DEP Forecasts as of Feb 2 predict a high probability of spill mitigation releases and/or reservoir spill by June 1



Our longstanding strategy: Improved Timing of Water Discharges

Water that would be spilled in May would be much more beneficial to river if released now.

We feel a need for, and hereby request ….

- An increased understanding and public transparency of the data, algorithms and process used to make the DEP forecasts of reservoir inflows and diversions.

- An assessment of the accuracy of these forecasts.