

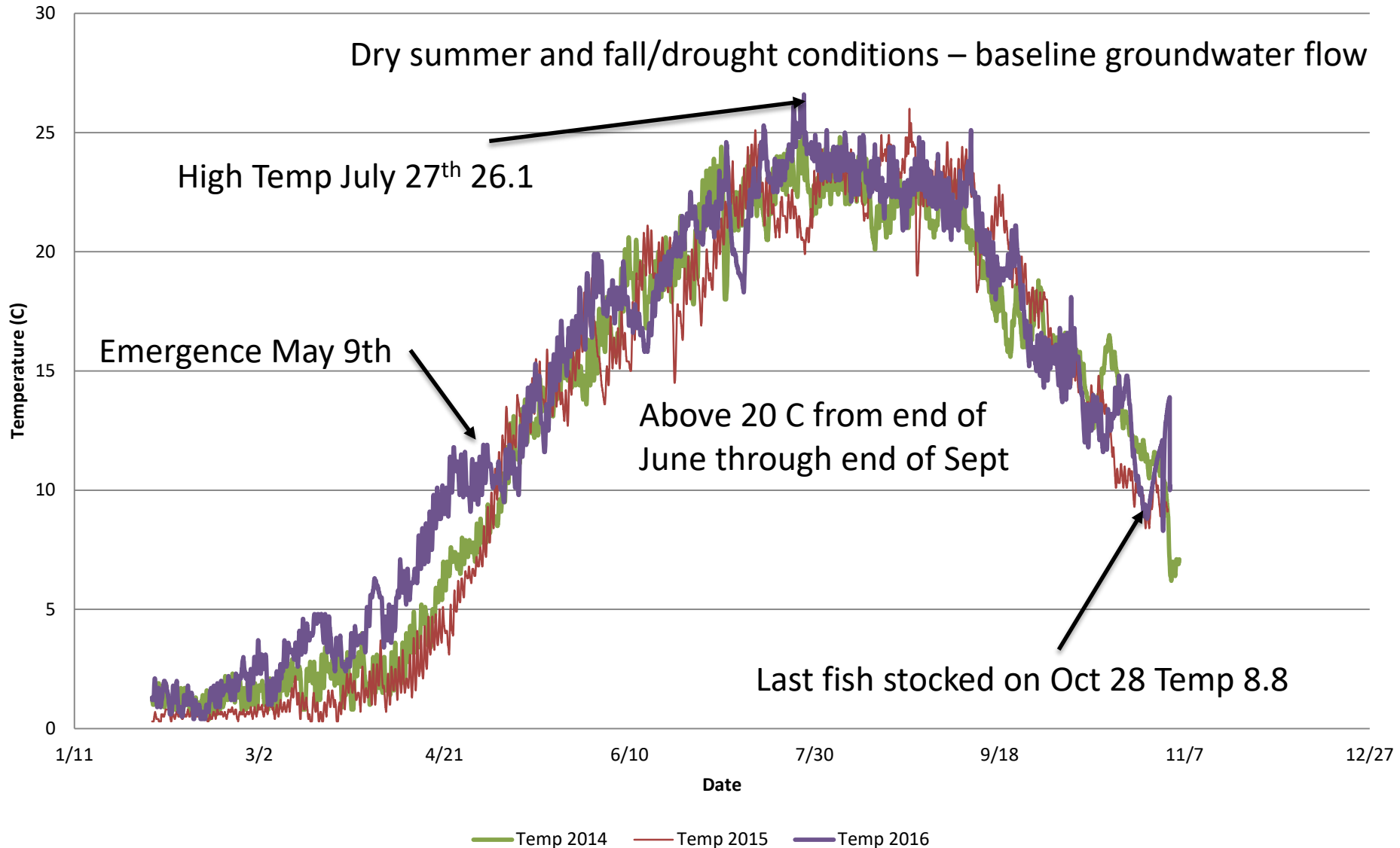


Parr Project: Winter 2017 Update



Peter Gray Hatchery Temperature

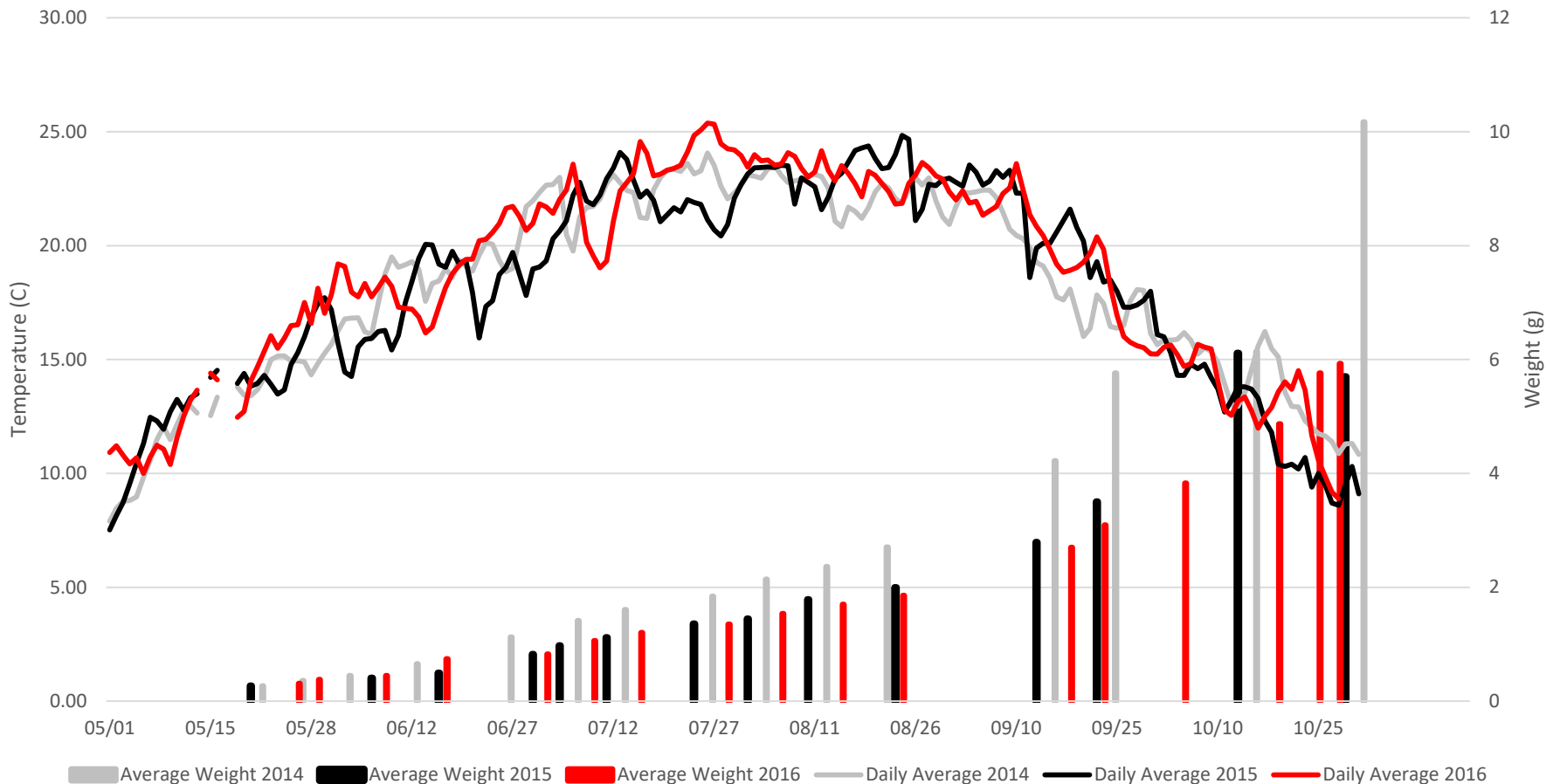
In-Hatchery Temperature 2014-2016



2012 to 2016 Growth of 0+ Parr

- Plotted with the average daily temperature (Celsius)
- Emergence (2012 and 2013) began the last week in April. Emergence in 2014 began May 19th, in 2015 on May 14th, and 2016 the May 9th. Feeding began at emergence.
- Average weight 5.93g at the end of stocking
- Note – sizes similar to what was seen in the wild.

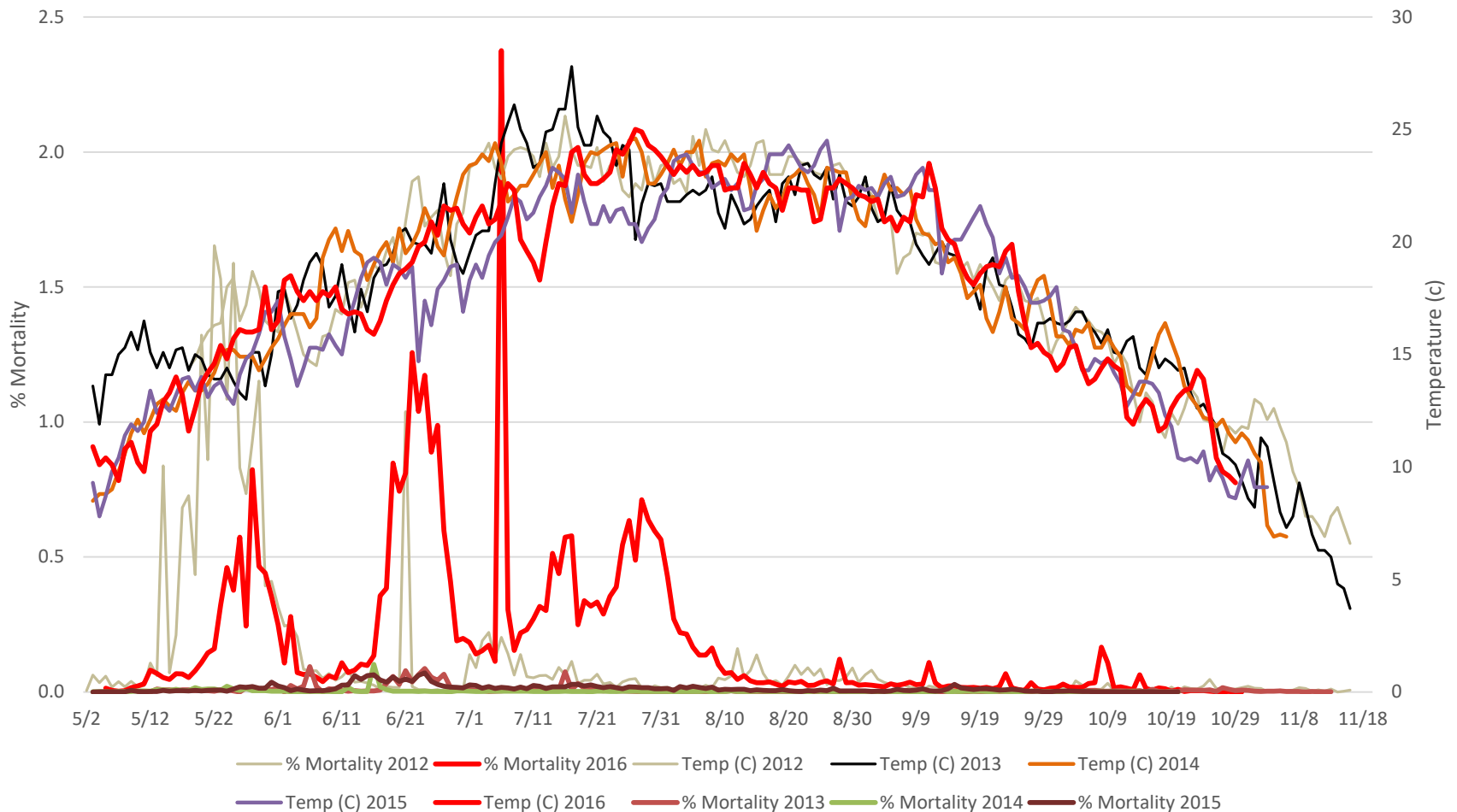
Growth Rate 2012 - 2016



Mortality 2012 - 2016

- Received 345,585 eggs from CBNFH in 2016
- Similar mortality in 2015 and 2016 due to higher temps and bacteria *Aeromonas hydrophila* (2015 - found in kidney samples) and *Plesimonas shigelloides* (2016)
- Estimate of survival for fry to parr in 2016 was 72%

Percent Mortality (daily) 2012-2016



Electrofishing

- DMR will present on Electrofishing



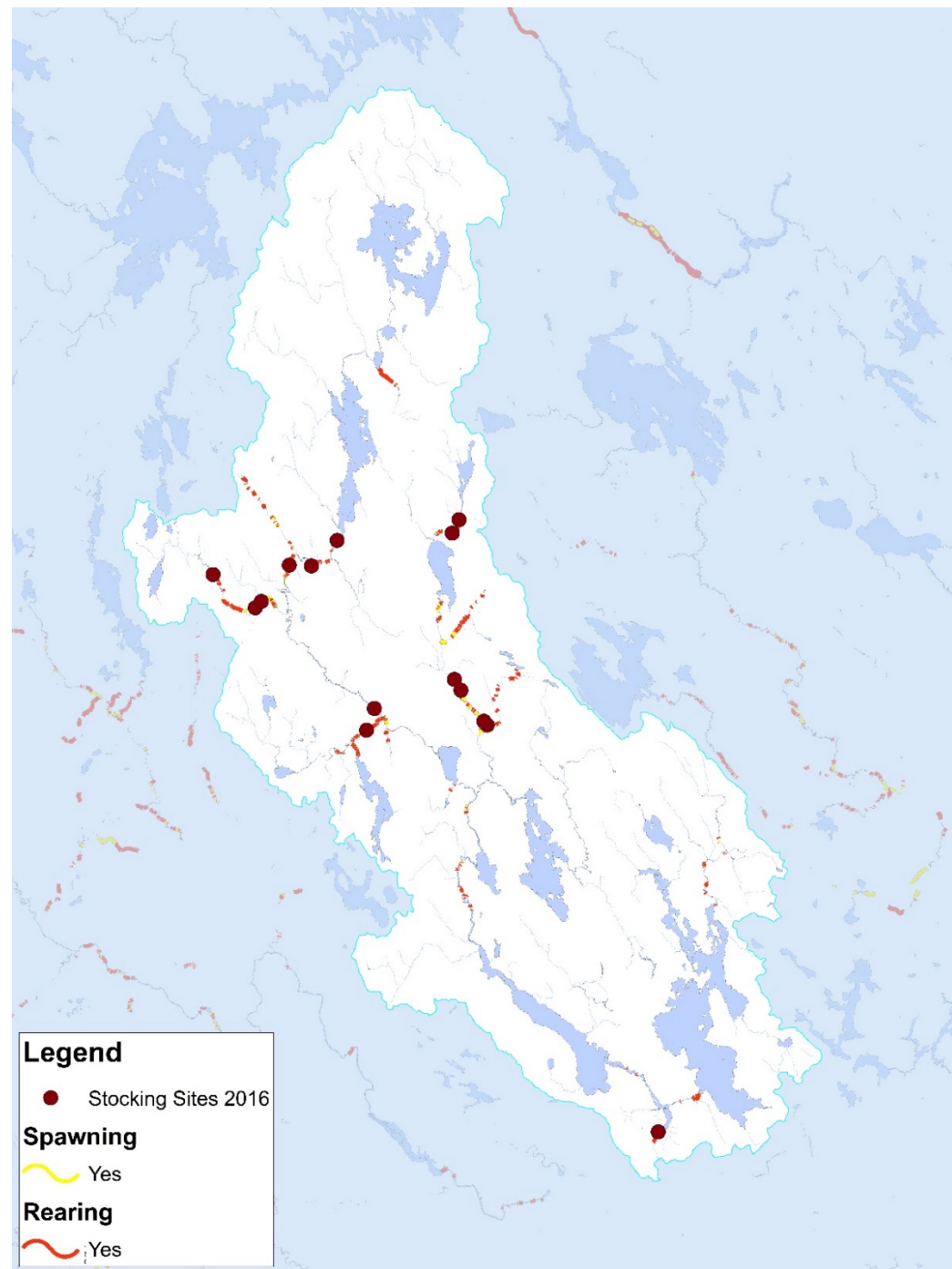
Fin Clipping 2016

- Hundreds of hours put in by volunteers fin clipping in 2016 and clipping took just over 3 weeks to finish
- Fin clipping also included DSF staff time, including 5 contracted workers. Also, thank you NOAA, USFW, and DMR for your clipping contributions.



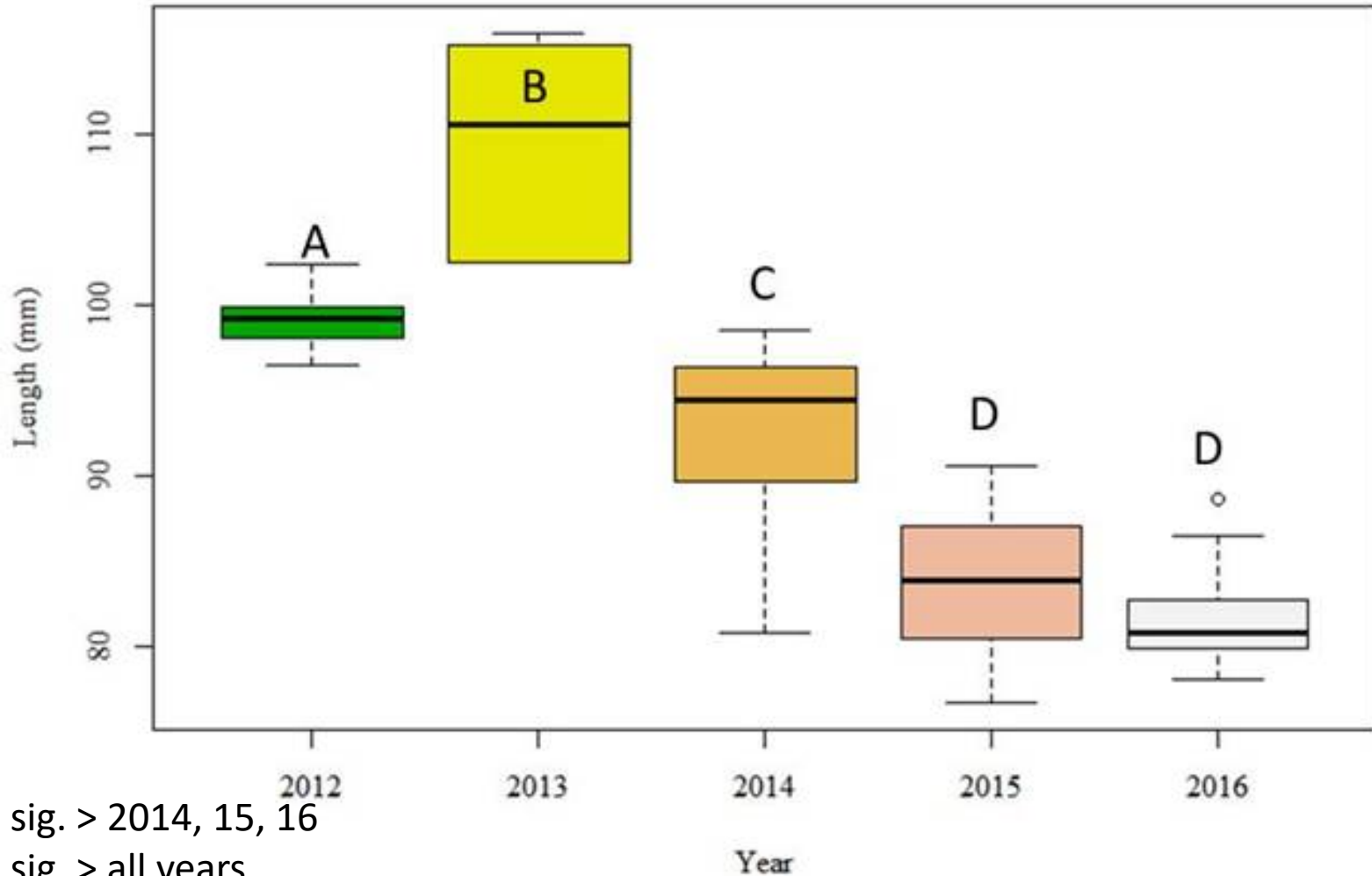
Stocking 2016

- Stocking densities increased to from 120 to 150 parr/unit.
- Northern Stream was increased from 45 to 60 parr/unit.
- 199,644 fall parr stocked in 2016
- The only site stocked below the smolt trap was the habitat in downtown East Machias.
- 18 sites were stocked (Mainstem and 7 tributaries)
 - Harmon and Creamer Brook were fry stocked (10,300 fish)
 - Beaverdam Stream (4 sites)
 - Seavey Stream (1 sites)
 - Barrows (2 sites)
 - Northern Stream (3 sites)
 - Richardson Brook (1 site)
 - Pokey Dam - Mainstem
 - Rte. 9 Rest Stop - Mainstem
 - Great Meadow Riffles - Mainstem (2 sites)
 - Downtown East Machias (1 site)
 - Finished stocking by October 28th
 - Some sites not stocked due to extremely low water conditions: Outlet of Love Lake, Long Lake Stream, above Second Lake, other sites on Seavey Stream



Estimated Lengths At Stock Out

- USFW estimation method that utilizes fish per pound at stock out to get the length of fish



2012 sig. > 2014, 15, 16

2013 sig. > all years

2014 sig. > 2015, 16

2015 NOT sig. diff. than 2016

Tukey multiple comparisons of means. Like letters indicate no significant difference between years – Thank you Colby

2016 Redd Counts

- 12 Redds found in the East Machias River System
 - 2 in Great Meadow (Mainstem), 4 between Rte. 9 and Bdam Landing (Mainstem) including 1 ATS seen, 3 in Beaverdam Steam below Rte. 9, 3 in Northern Stream below 19 Rd.
 - Majority of redd count trips were walked due to low water
 - DMR smolt to adult return rates for 2016 – 16 adult returns estimated from DMR's equation. Smolt population in 2014 was 1019, which gives estimated smolt to adult return rate of 1.6%. This is comparable to naturally reared production and better then smoltstocking return rates.



2017 So Far...

- Eggs delivered to East Machias – 378,289
- Received 154,769 on Jan 4th, 162,244 on Jan 20th, and 61,276 on Jan 31st
- 90% hatch predicted for early March with transfer to SIBs
- 10,300 unfed fry will be stocked in Creamer Brook and Harmon Brook as in previous years
- Between eggs picked so far and classroom eggs the estimated number on station currently is around 367,000 eggs



Fish Friends (formerly Salmon in the Schools)

- 8 Schools
 - Peninsula School, RMG (Machias), Wesley Elementary, Elm Street School, Ft. O'Brien, Jonesport-Beals, SHEAD high school, Alexander
- 1,600 eggs delivered

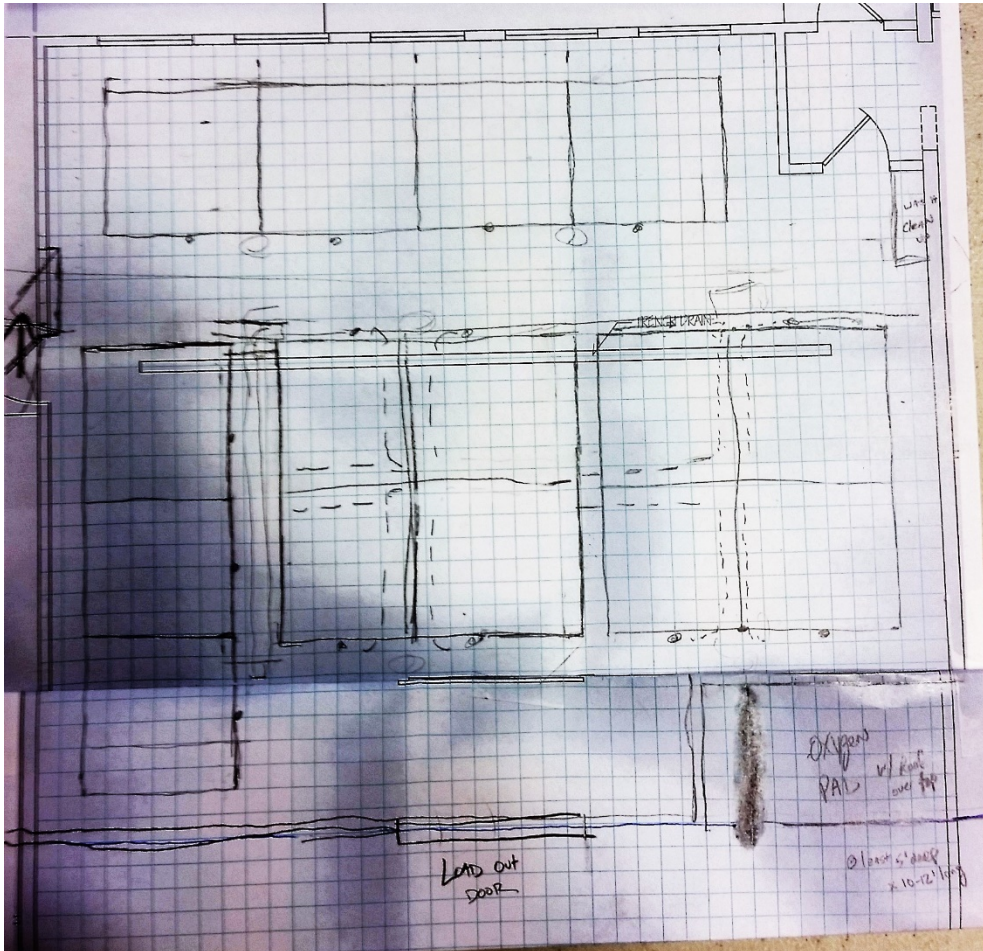


Changes and Adaptations

- Rachel Gorich hired as Assistant Hatchery Manager/Fisheries Biologist
- Kyle has shifted into land trust (35 mile campaign)/project management
- Zach moved into Hatchery Manager role
- Tweaked screen design to help with tank cleanliness
- Continued research into viability of having adult broodstock at CCAR in Franklin, Maine
- Expansion

Facility Expansion

- 36'x44' expansion off the back of the building. Could fit up to 15 tanks.
- Partial funds raised with continued fundraising occurring as we speak



Media/Publicity for Salmon

- Portland Press article during a ladies' night during fin clipping
- ABC 7/Fox 22 came out during stocking to film local students stocking salmon
- Bangor Daily News article on stocking
- Article in Fly Fisherman magazine
- And others including Machias Valley News and Daily Observer
- <https://mainesalmonrivers.org/parr-project/press/>

Questions/Concerns/Comments?

