

Broodstock Collection Activities Fall 2012

**Fisheries Technical Feedback Group Meeting
Sacramento, Ca
November 2, 2012**

**SAN JOAQUIN RIVER
RESTORATION PROGRAM**



Early Coordination of Activities

- Paul Adelizi, Margarita Gordus, Michelle Workman conducted many coordination calls with FRFH staff, CDFG Pathology staff, and NMFS beginning in early September
 - Proposed spawning dates for spring-run
 - Pathology requirements and protocols
 - CWT reading, hallprint tag reading, genetics
 - Staffing needs
 - Logistics
- Convened the Donor Stock Collection Plan Workgroup to discuss our plans prior to implementing actions



Spring Run Chinook Salmon Spawning

- Ladder opened on September 18, 2012
- Fish sorted into holding tanks
 - Hallprint tag fish held separately
- First spawn date September 21
- SJRRP staff participated in spawning on Sept. 21, 25 and 28 to capture variation



Broodstock Collection Logistics

- On each date (Sept. 21, 25, 28)
 - First 30 males/females with adclip and hallprint tags were selectively mated
- SJRRP staff
 - Recorded hallprint tag number
 - Tracked each mating pair by number
 - Tracked egg tray number and total ounces of eggs per tray
- CDFG Tissue Archive Staff
 - Collected heads, otoliths, tissue samples, FL
 - Committed to reading cwt information within the 30 day pathology testing period to assist with final crosses chosen for broodstock
- DFG Pathology
 - Collected ovarian fluid from every female and batched them in 5/sample for BKD/IHN testing
- NMFS Science Center
 - Is conducting gene mapping on all FRFH spring run (including those collected for SJRRP) and we will be provided those data when available



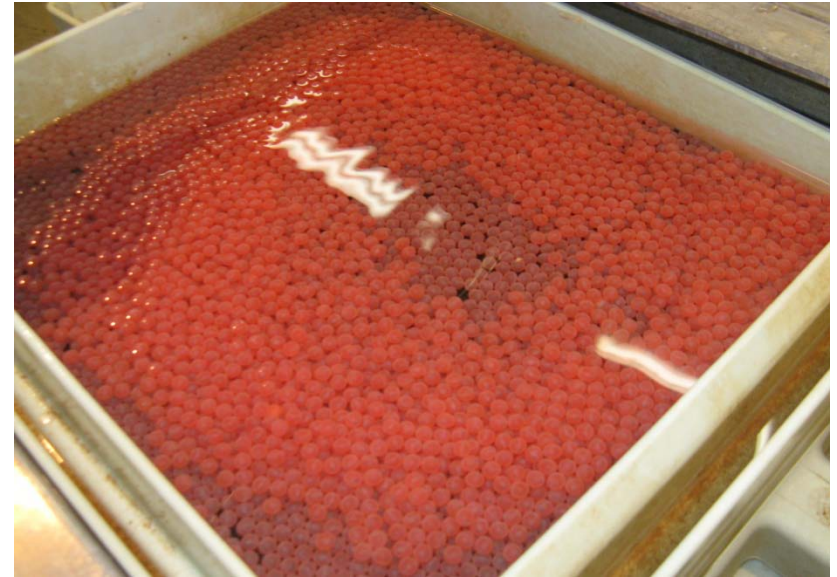
Broodstock Egg Tracking

- Stacks 5-10 set aside for SJRRP
 - Stacks 5/6 – 30 trays lot 1
 - (Sept. 21 spawn date)
 - Stacks 7/8 – 30 trays lot 2
 - (Sept. 25 spawn date)
 - Stacks 28 – 30 trays lot 3
 - (Sept. 21 spawn date)
- 90 crosses collected and incubated to allow for exclusions



Broodstock Egg Tracking

- Lot 1- Sept. 21
 - Estimated 123,255 eggs
- Lot 2- Sept. 25
 - Estimated 137,856 eggs
- Lot 3- Sept. 28
 - Estimated 143,412 eggs
- Total: 404,523 (flaccid)



Broodstock Egg Tracking

- Culling Criteria – CWT information

- Yellow - at least one fall-run parent based on CWT data
- Orange - at least one parent missing CWT, run unknown.
- Gray - data inconsistencies, see comment section.

- Results

- 5 crossed culled Lot 1
- 9 culled from Lot 2
- 6 culled from Lot 3
- 70 good crosses to move forward

DATE	Cross #	♂ Male Data							♀ Female Data						
		Hallprint#	Head Tag#	CVTA ID#	CWT#	FK (mm)	Brood Year	Run	Hallprint#	Head Tag#	CVTA#	CWT#	FK (mm)	Brood Year	Run
9/21/2012	1	5518	12754	C120002FRH	68034	790	2009	S	0782	12753	C120001FRH	68034	750	2009	S
9/21/2012	2	0581	12758	C120006FRH	68040	670	2009	S	5806	12755	C120003FRH	68035	700	2009	S
9/21/2012	3	4838	12757	C120005FRH	68034	832	2009	S	0860	12756	C120004FRH	68035	685	2009	S
9/21/2012	4	2578	12816	C120064FRH	68039	738	2009	S	6048	12759	C120007FRH	68035	770	2009	S
9/21/2012	5	5856	12791	C120040FRH	68039	668	2009	S	4053	12766	C120014FRH	68034	761	2009	S
9/21/2012	6	2471	12760	C120008FRH	68035	866	2009	S	2140	12767	C120016FRH	68034	725	2009	S
9/21/2012	7	0835	12761	C120009FRH	68035	820	2009	S	0355	12808	C120056FRH	68034	766	2009	S
9/21/2012	8	2568	12764	C120012FRH	68034	830	2009	S	0733	12814	C120062FRH	68034	747	2009	S
9/21/2012	9	1244	12762	C120010FRH	68034	780	2009	S	5908	12763	C120011FRH	68035	680	2009	S
9/21/2012	10	0436	12770	C120019FRH	68034	716	2009	S	2950	12777	C120026FRH	68034	750	2009	S
9/21/2012	11	0326	12769	C120018FRH	68039	868	2009	S	2015	12789	C120038FRH	68034	730	2009	S
9/21/2012	12	2621	12780	C120029FRH	68034	869	2009	S	0332	12809	C120057FRH	68034	795	2009	S
9/21/2012	13	3188	12812	C120060FRH	68034	699	2009	S	0643	12792	C120041FRH	68034	795	2009	S
9/21/2012	14	0608	12788	C120037FRH	68034	805	2009	S	5768	12775	C120024FRH	68035	679	2009	S
9/21/2012	15	4582	12771	C120020FRH	68038	795	2009	S	7156	12779	C120028FRH	68034	748	2009	S
9/21/2012	16	0584	12772	C120021FRH	68034	815	2009	S	1549	12778	C120027FRH	68034	710	2009	S
9/21/2012	17	2926	12773	C120022FRH	68030	835	2008	S	0140	12776	C120025FRH	68034	690	2009	S
9/21/2012	18	2727	12774	C120023FRH	NONE	835	NONE	NON	7477	12787	C120036FRH	68040	700	2009	S
9/21/2012	19	2770	12790	C120039FRH	68034	735	2009	S	0881	12807	C120055FRH	68034	789	2009	S
9/21/2012	20	5199	12781	C120030FRH	68035	704	2009	S	0964	12811	C120059FRH	68034	728	2009	S
9/21/2012	21	0483	12784	C120033FRH	68034	820	2009	S	0179	12783	C120032FRH	68034	718	2009	S
9/21/2012	22	7434	12782	C120031FRH	68023	955	2008	S	1718	12813	C120061FRH	68034	707	2009	S
9/21/2012	23	2082	12786	C120035FRH	68034	775	2009	S	3158	12785	C120034FRH	68035	695	2009	S
9/21/2012	24	5991	12810	C120058FRH	68668	839	2009	F	4428	12797	C120045FRH	68034	730	2009	S
9/21/2012	25	3433	12804	C120052FRH	68040	731	2009	S	7248	12796	C120044FRH	68037	739	2009	S
9/21/2012	26	5979	12805	C120053FRH	NONE	747	NONE	NON	1206	12799	C120045FRH	68034	686	2009	S
9/21/2012	27	3756	12800	C120048FRH	68034	685	2009	S	0350	12801	C120049FRH	68034	668	2009	S
9/21/2012	28	1932	12793	C120042FRH	68034	690	2009	S	0157	12803	C120051FRH	68034	656	2009	S
9/21/2012	29	3941	12795	C120043FRH	68034	739	2009	S	0533	12798	C120046FRH	68034	721	2009	S
9/21/2012	30	3495	12815	C120063FRH	68039	723	2009	S	0196	12802	C120050FRH	68023	876	2008	S



Broodstock Egg Tracking

- **SJRRP Staff**

- assisted with picking dead eggs, remeasuring and culling trays
- Lot 1- picked/culled on Oct 16
- Lot 2 – picked/culled on Oct. 19
- Lot 3 – picked/culled on Oct. 23

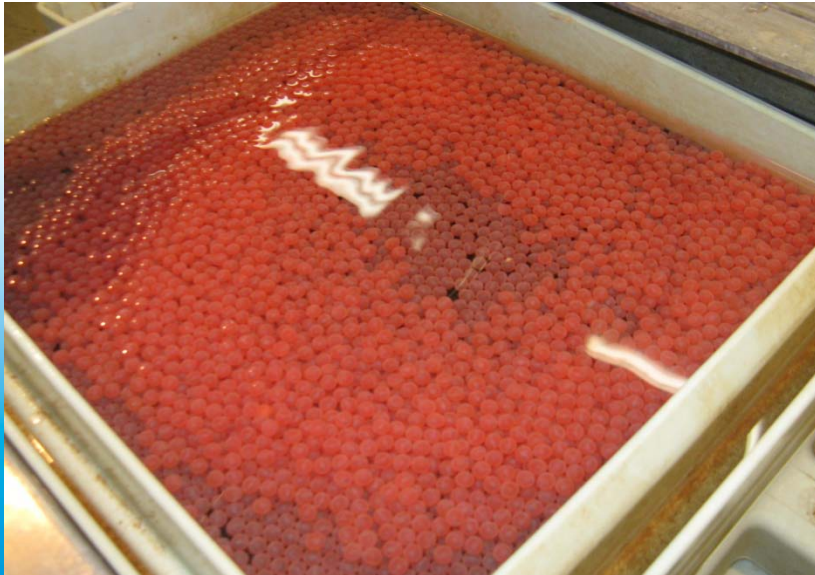
- **DFG Staff**

- 8 eggs per tray transported to Silverado by DFG staff on Oct. 24 for the 560 broodstock
- Sorted translocation fish on October 25 -
- Held in deep tanks at FRFH until permitting completed

San Joaquin Eggs 2012					
Lot 1					
Tray	Stack 5	Eggs/Oz	Ounces to Keep	#Eggs	
1	52	94	13	1222	
2	0	0	0	0	
3	28	90	13	1170	
4	64	80	15	1200	
5	35	94	13	1222	
6	52	106	11	1166	
7	40	106	11	1166	
8	49	94	13	1222	
9	38	101	12	1212	
10	40	92	12	1104	
11	21	100	12	1200	
12	27	109	11	1199	
13	63	97	12	1164	
14	16	90	13	1170	
15	48	85	14	1190	
Tray	Stack 6	Eggs/Oz	Ounces to Keep	#Eggs	
1	17	98	12	1176	
2	40	97	12	1164	
3	0	0	0	0	
4	58	97	12	1164	
5	52	84	14	1176	
6	38	104	11	1144	
7	42	86	14	1204	
8	42	99	12	1188	
9	0	0	0	0	
10	36	96	12	1152	
11	0	0	0	0	
12	34	113	11	1243	
13	12	99	12	1188	
14	0	0	0	0	
15	58	70	17	1190	
TOTAL				29,596	

Broodstock Egg Tracking Post Cull

	Lot 1	Lot 2	Lot 3	Total/Average
Total Eggs Moved to Interim Facility	200	168	192	560
Total Eggs Separated for Translocation	28,489	24,736	28,614	81,839
Average Fecundity/Spring-run	3,901	4,568	4,793	4,421
Percent Survival Green to Eyed Eggs	79.3	81.6	77.1	79.3





Next Steps

- Broodstock eggs (which are currently hatching!) can remain at Silverado until temperature becomes limiting (approx. late March/April)
- Once the DFG consistency determination is complete, they can be moved to the Interim Facility
- Translocation fish can remain at FRFH until June
- The 10a1A covering translocation, 10J and 4d rules need to be complete for fish to be moved to the San Joaquin River

QUESTIONS?