

# San Joaquin River Restoration Program

Draft Donor Stock Collection Plan  
Spring 2012


Developed by:  
Donor Stock Collection Plan Work Group

With input from:  
Conservation Subgroup  
Reintroduction Monitoring Subgroup



## Goals

- Provide the information presented in the Draft DSCP – following the document format
- Get feedback from the technical experts in the audience to refine the recommendation and supporting information (today and beyond)
- Incorporate input into final submittal to USFWS




## DSCP Recommendation

- Conservation Facility and Translocation

Table 1. Donor Stock Collection Recommendations - Spring Run Chinook Salmon 2012

Source	Lifestage	Number	Purpose	Disposition
Feather River Fish Hatchery (ALL)	Spring Run Eyed Eggs	60	Pathology	Sacrificed
	Spring Run Eyed Eggs	500	Broodstock Development	San Joaquin Conservation Facility
	Spring Run Eyed Eggs	75,000	translocation	FRFH to San Joaquin River (45,000 streamside incubation to net pens) (30,000 instream incubation to net pens)
	Spring Run Eyed Eggs	5,000	Juveniles	Quarantine Facility to San Joaquin River Acoustic/PIT tag releases



## Donor Population Status

We evaluated: recent returns, surplus fish

Table 3. Feather River Hatchery Spring-Run Chinook Returns

Year	Male	Female	Jack	Smolts Released
2004	2,100	1,530	572	3,642,318
2005	927	824	23	1,801,748
2006	1,379	673	9	2,080,210
2007	866	980	2	2,686,808
2008	761	666	7	2,024,012
2009	369	464	122	2,122,131
2010	1,001	654	6	2,337,843
2011	855	976	138	To be determined

(Source: Feather River Hatchery Staff, January 2012)

Surplus Feather River Hatchery Spring-Run 2008-2011

	Female	Male	Jack	Died in Tank
2011	255	231	No data	No data
2010	154	23	6	256
2009	0	2	34	76
2008	47, unknown gender		No data	240

Can use the number tagged in May/June for Projecting 2012 availability of surplus

Table 4. Number of Adult Spring-run Chinook Salmon tagged in the Feather River in the Spring

Year	Total Tagged	Hatchery Recaptures	% Recaptures
2004	3,650	834	22.8
2005	5,960	1,835	30.7
2006	10,179	1,768	17.4
2007	9,756	1,849	18.9
2008	1,915	1,058	55.2
2009	1,462	989	67.6
2010	3,502	1,661	47.4
2011	6,023	1,969	32.7

(Source: Feather River Department of Water Resources Staff)



## Conservation Facility

- Status of the Facility
  - CEQA Completion
  - Secure Water Supply



## Conservation Facility

- Recommendation
  - Broodstock Development
    - 50 unrelated females and equal males = 100 broodstock
  - Minimum number of crosses
    - 80-100 crosses segregated to achieve minimum 50
    - All CWT fish
    - 5% jacks
  - Conservation Practices
    - Minimize selection pressure
    - Maximize effective population size

 **Conservation Facility**


- Collection Methods
  - 15-20 crosses segregated daily
  - Each cross in individual incubation trays or sectioned trays for space
  - Ovarian fluid taken for pathology
  - Eggs transferred to hatch at Silverado and 60 juveniles sacrificed for Pathology (30 day holding)
  - Transfer to Interim Facility




 **Conservation Facility**


- Final Disposition
  - Interim Facility – some may be direct released as juvenile – majority broodstock
- Contingency Planning
  - Hold at FRFH (if SFB unavailable)
  - If Interim Facility unavailable
    - Hold at SFB (to April only)
    - Hold at CABA (up to 1 year)




 **Translocation**

- San Joaquin River Existing Conditions
  - Major construction still pending
  - Seepage, passage, entrainment, false migration
    - Still being evaluated during interim flows



 **Translocation**

- Recommendation
  - 80,000 eyed eggs
    - Primary focus is reintroduction in a research framework
      - Learning through actions
    - 2 methods of incubation in Reach 1A (instream and streamside)(~75,000)
      - Evaluate survival to emergence
    - Trap and haul survivors to below Sack Dam
      - Evaluate trap and haul success
      - Avoid existing passage, entrainment risk
    - ~5,000 juveniles for acoustic/PIT tag releases



## Translocation

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- **Collection Methods**
  - Same crosses as for conservation facility
- **Reintroduction Methods**
  - Streamside Incubators
  - Instream Incubators
  - Net Pens
  - Trap and Haul
  - Acoustic/PIT releases
- **Final Disposition**
  - San Joaquin River



## Translocation

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- **Contingency Plans**
  - If 10j rule not complete by Fall 2012
    - Hold at FRFH until February
    - Hold at SFB until April
    - Net pens in reach 1A for imprinting
    - Release below Sack Dam



## Workgroup Consideration

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- Number of parental crosses
- Certainty of spring-run heritage
  - Hallprint/CWT
- Resource Availability
  - Staffing
  - Funding
  - Facilities
  - Permitting (CEQA)



## Appended Items

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- Protocols for Conservation Facility Activities
- Protocols for Translocation Activities
- Conservation Subgroup Recommendation –
- Reintroduction Monitoring Recommendation



## Next Steps

- **TIMELINE FOR THE DSCP**
  - January 31<sup>st</sup> Recommendation goes from DSCPWG to the USFWS for review
  - February 29<sup>th</sup> Recommendations submitted to NMFS and DFG by USFWS
  - This gives NMFS 60 days, and they can evaluate the DSCP along with the Permit Application
  - NMFS determination on the Permit Application by April 30<sup>th</sup>, 2012
  - DFG has 30 days after NMFS decision to provide concurrence (May 30<sup>th</sup>)
  - June 1<sup>st</sup> would be the first collection opportunity for the first cycle
  - All collection requests begin at the eyed egg stage (Sept/Oct 2012)



## Suggestions/Comments/Input

- Recommended Take
- Supporting Information
- Process for Input
- Timelines