

Comprehensive Assessment and Monitoring Program (CAMP)

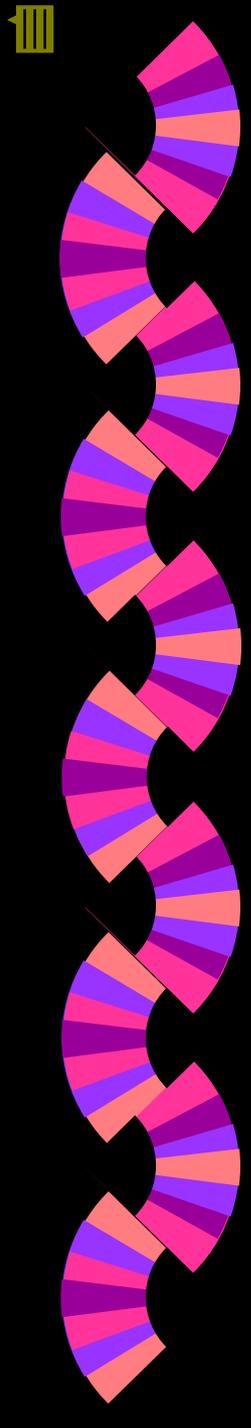
Doug Threlhoff

Fish and Wildlife Service

John Hannon

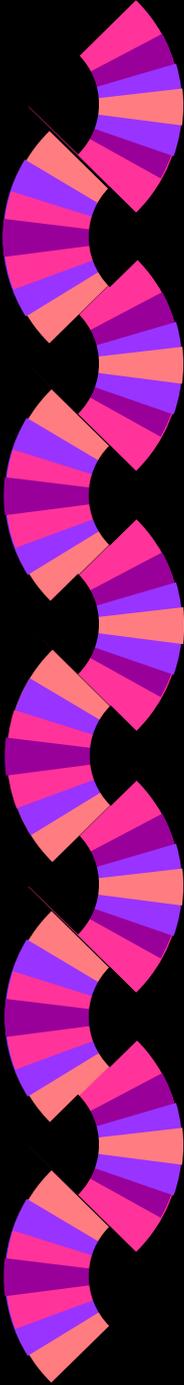
Bureau of Reclamation





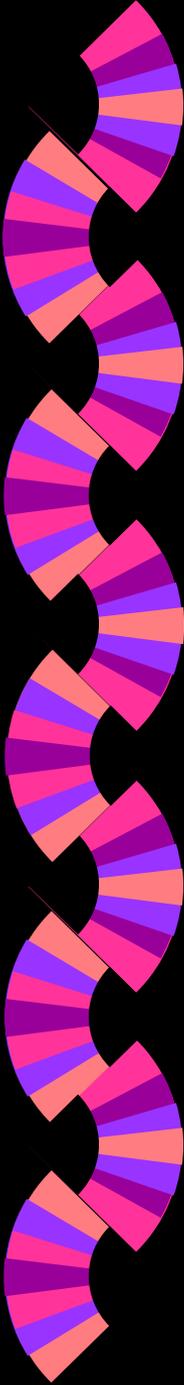
This presentation will provide an overview of:

1. **CAMP accomplishments in FY 2008.**
2. **CAMP activities that are expected to occur in FY 2009.**
3. **Monitoring activities that were conducted with Central Valley Project Improvement Act funds in FY 2007.**



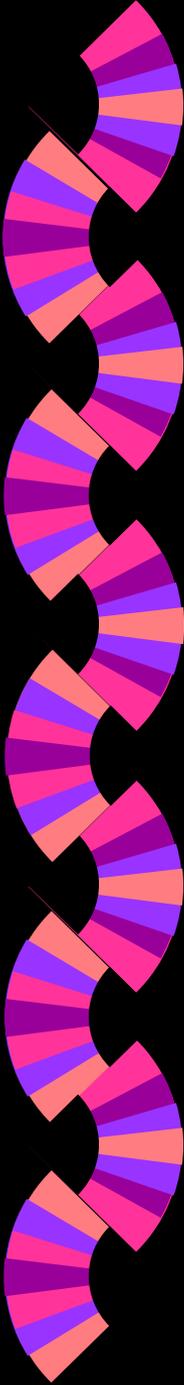
The foundation for the CAMP:

Section 3406(b)(16) of the Central Valley Project Improvement Act requires that a comprehensive assessment program be established to monitor fish and wildlife resources in the Central Valley and assess the biological results and effectiveness of restoration activities.



The CAMP has 2 objectives:

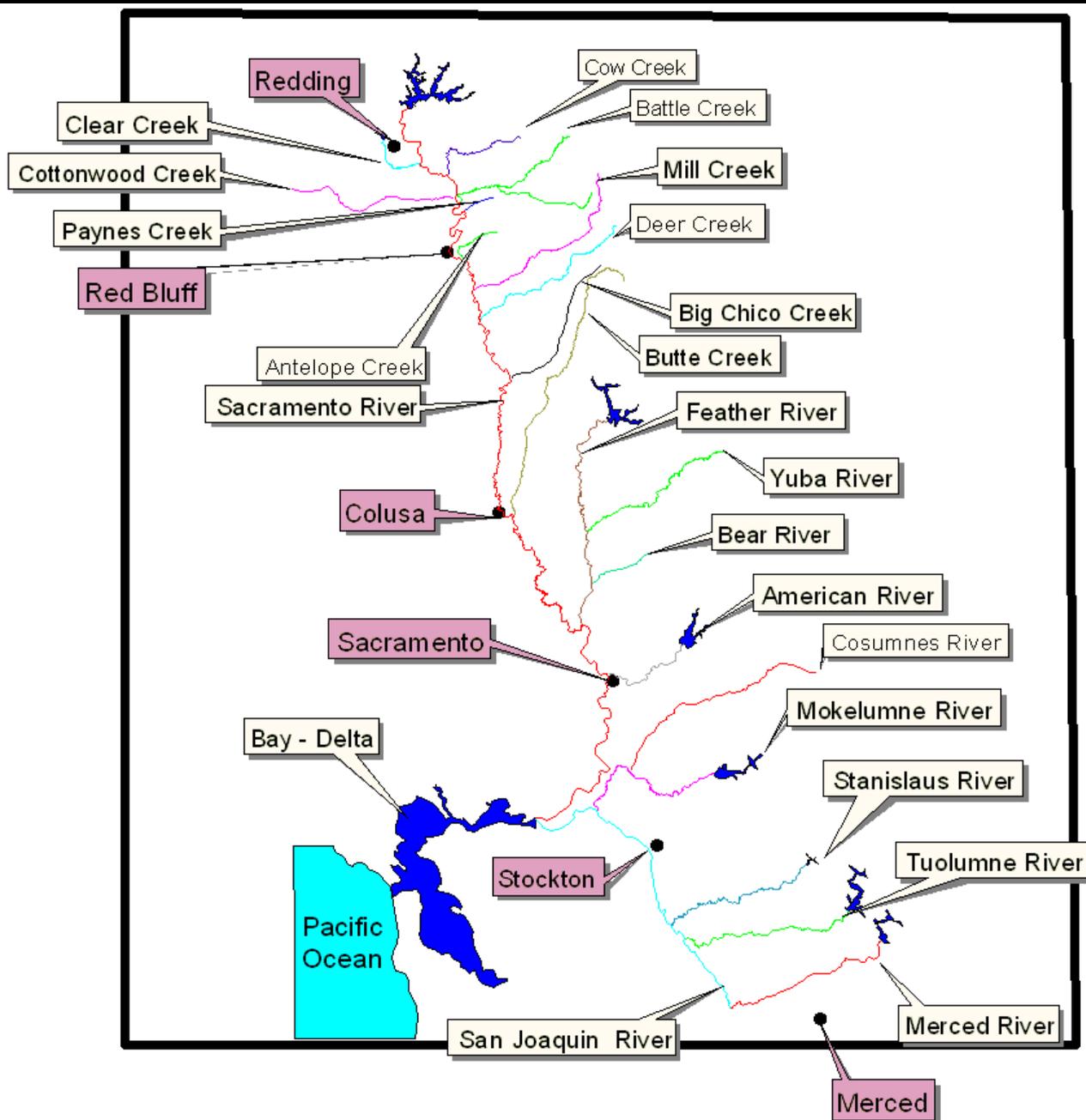
1. Assess the **overall** effectiveness of restoration actions in meeting AFRP production targets.
2. Assess the **relative** effectiveness of four restoration categories, i.e., water management modifications, structural modifications, habitat restoration, and fish screens.



The CAMP also strives to:

- ◆ Provide leadership in terms of standardizing monitoring techniques and data reporting.
- ◆ Provide data to Department of the Interior managers, stakeholders, and the general public.

Watersheds or areas that are of interest to CAMP



The CAMP is primarily interested in nine anadromous fish taxa that include:

- ◆ four runs of Chinook salmon
- ◆ green and white sturgeon
- ◆ American shad
- ◆ striped bass
- ◆ steelhead

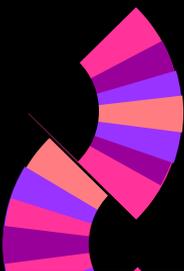


Photo courtesy of Marty Gingras, CDFG



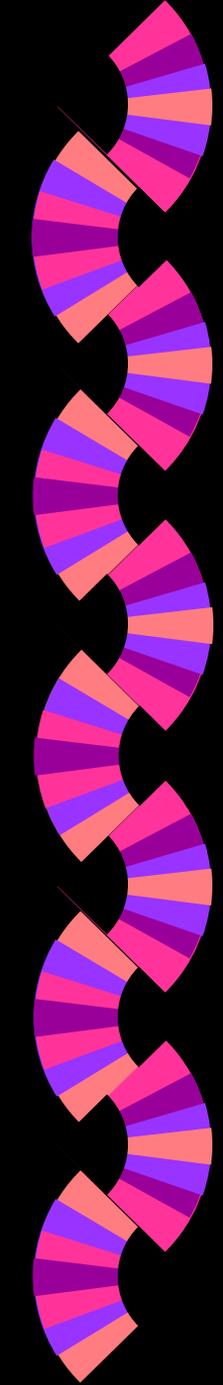
Fall midwater trawl survey for American shad in the Suisun Bay





Monitoring juvenile Chinook salmon abundance using a rotary screw trap below the Red Bluff Diversion Dam



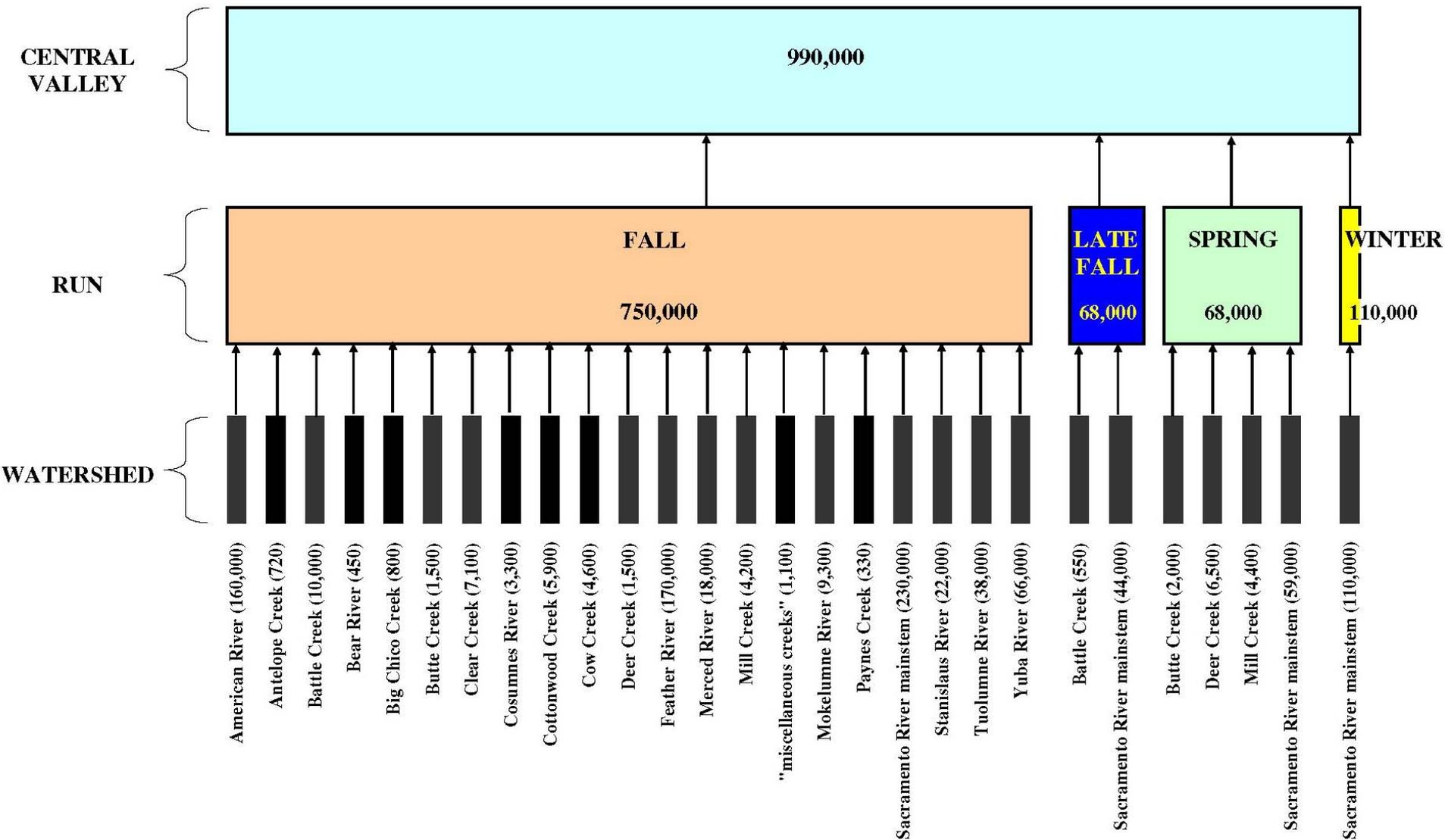


FY 2008 CAMP Accomplishments

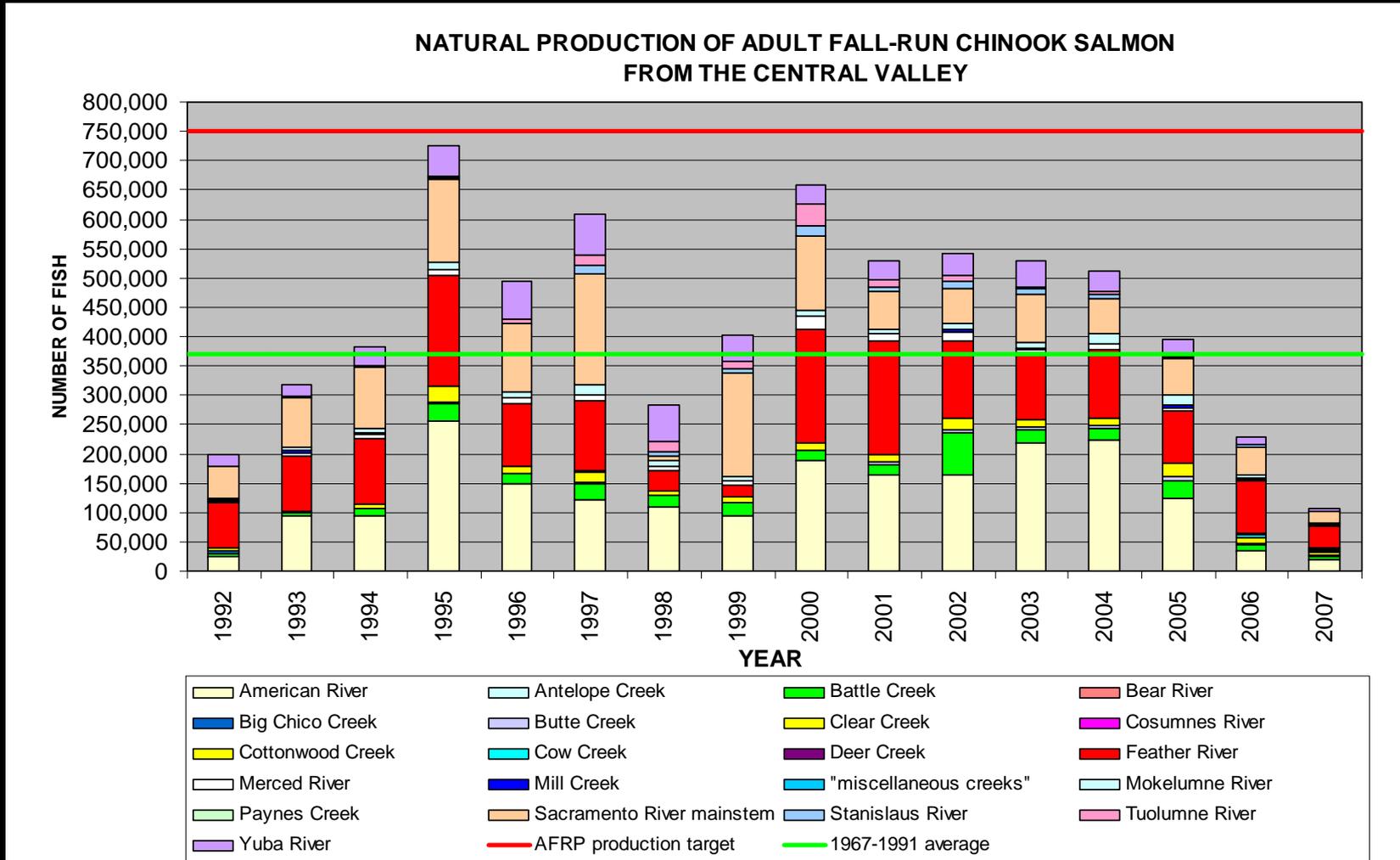
- 1. Developed an “annual” report providing a synthesis of anadromous fish monitoring data collected between 1992 and 2007. These data were analyzed to assess changes in fish numbers over time, and are compared to AFRP fish production targets.**

AFRP CHINOOK SALMON PRODUCTION TARGETS

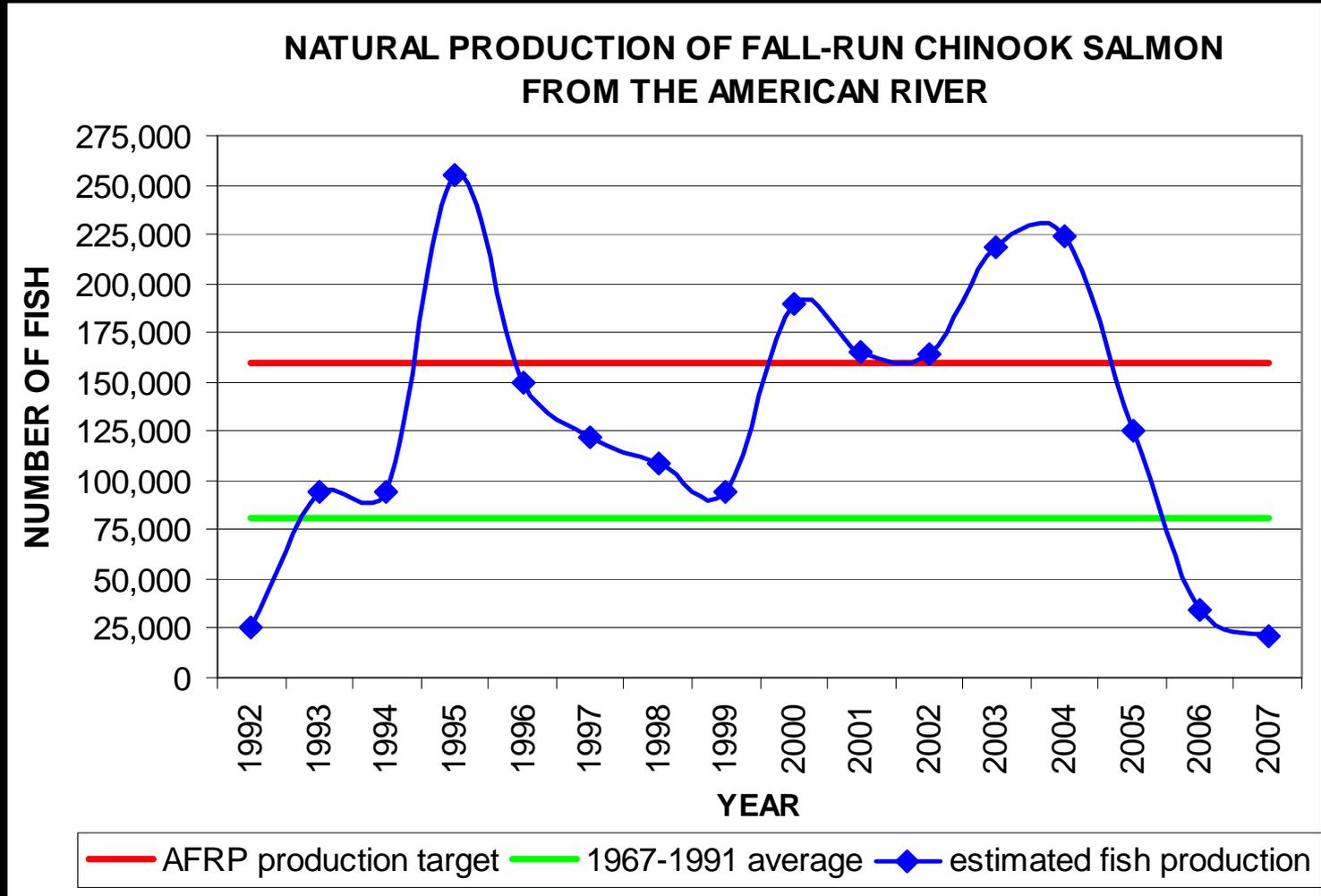
numbers reflect the number of naturally produced adult fish



Estimated natural production of adult fall-run Chinook salmon from the Central Valley, 1992-2007. Annual estimates reflect contributions from 21 watersheds.



Estimated natural production of adult fall-run Chinook salmon from the American River, 1992-2007.



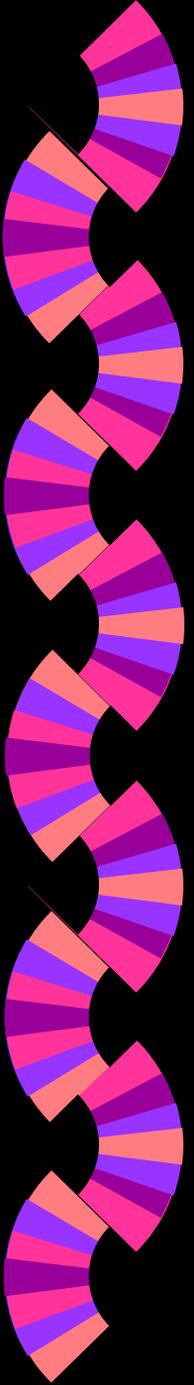
FY 2008 CAMP Accomplishments

2. Updated a website for distributing CAMP-related data and documents to the public and interested stakeholders.

The website address is:

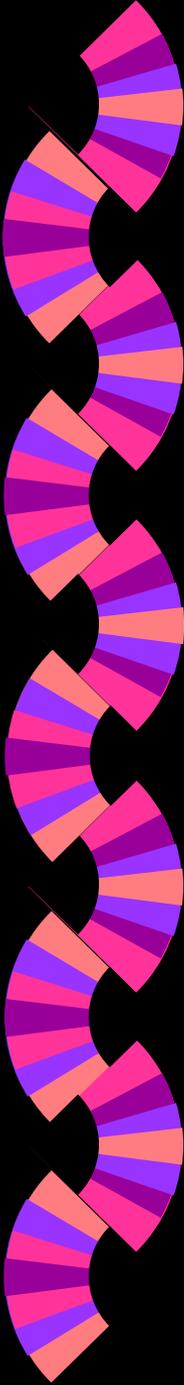
<http://www.fws.gov/sacramento/CAMP/index.htm>





FY 2008 CAMP Accomplishments

- 3. Completed a peer review to evaluate the feasibility of conducting CAMP Program Objective #2, i.e., assess the relative effectiveness of four categories of restoration actions implemented under CVPIA Section 3406(b).**



FY 2008 CAMP Accomplishments

4. **Developed an Excel spreadsheet summarizing monitoring and research activities funded with CVPIA funds in FY 2007.**

Projected FY 2009 CAMP activities:

1. Continue to develop an annual report tracking the production of eight anadromous fish taxa.

COMPREHENSIVE ASSESSMENT AND MONITORING PROGRAM

Assessment of Anadromous Fish Production in the
Central Valley of California between 1992 and 2008

Report prepared by the
United States Department of the Interior
U.S. Fish and Wildlife Service
and
U.S. Bureau of Reclamation



2009



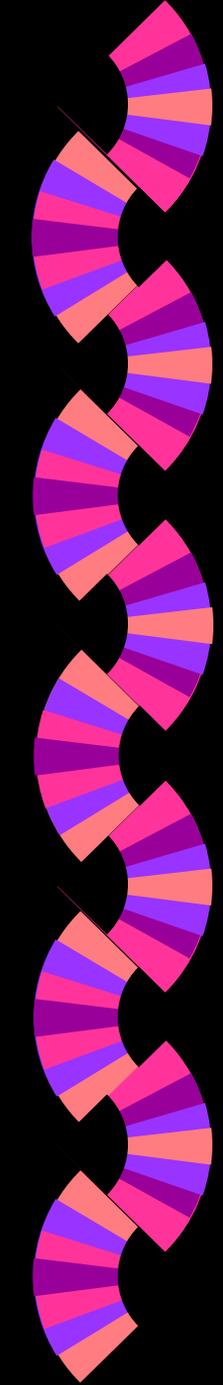
Projected FY 2009 CAMP activities:

2. Continue work with the Pacific States Marine Fisheries Commission to develop statistical and structural design recommendations for a comprehensive database to document and understand changes in the abundance of juvenile Chinook salmon.

Projected FY 2009 CAMP activities:

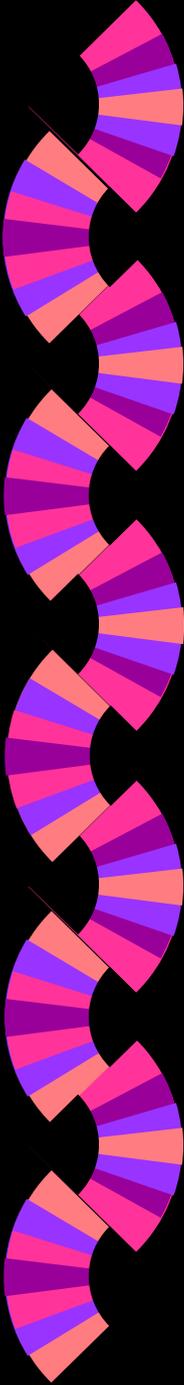
3. Assess the strengths and limitations of rotary screw trap data from the Stanislaus River.



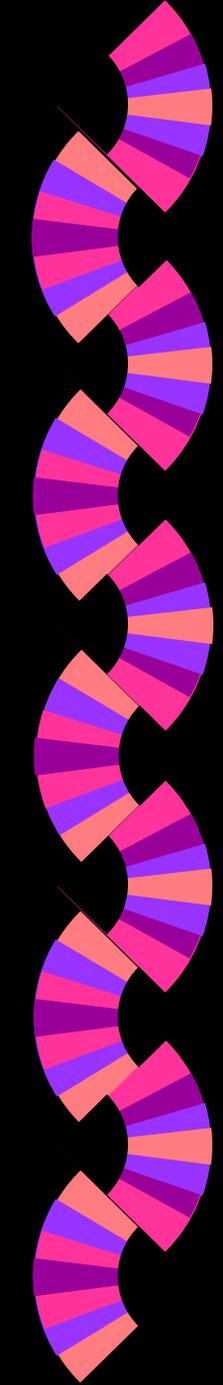


Projected FY 2009 CAMP activities:

4. Collect, review, and standardize rotary screw trap data quantifying the number of juvenile Chinook salmon caught in the Central Valley.

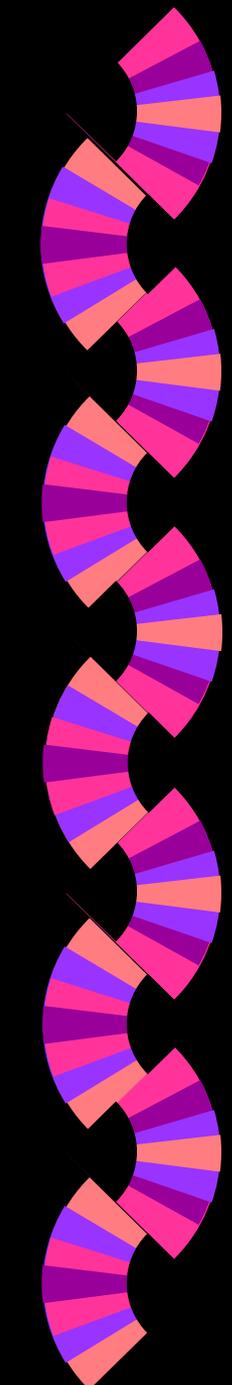


Overview of monitoring
activities conducted with
CVPIA funds in FY 2007



A spreadsheet describing 122 data collection activities that were funded with CVPIA funds in FY 2007 is available on the CAMP website.

Activities funded in 2008 will be added to the spreadsheet over the next few months.



The spreadsheet can be used to understand the:

1. Number of data collection activities that were initiated or conducted by a CVPIA program;
2. Number of data collection activities pertaining to different species;
3. Number of data collection activities pertaining to different watersheds/areas; and
4. Reason for initiating or conducting the data collection activity.