

**CONSIDERATION OF PROPOSED ORDER ACTING ON
PETITIONS FOR RECONSIDERATION OF THE EXECUTIVE
DIRECTOR'S 2015 TEMPORARY URGENCY CHANGE
PETITION ORDERS FOR THE SWP AND CVP**



December 7 Draft Order

- **Addresses:** petitions for reconsideration, major objections received on Temporary Urgency Change Petition (TUCP) Order and Sacramento River Temperature Plan (TMP)
- **Denies in part:** petitions on previous approvals and finds that approvals supported based on information available at the time
- **Grants in part:** petitions and extends the TUCP Order to better respond to future drought

TUCP, Order and Modifications

- **January 23, 2015:** TUCP submitted by U.S. Bureau of Reclamation (Reclamation) & Department of Water Resources
- **February 3, 2015:** Executive Director Issued TUCP Order temporarily modifying Decision 1641 requirements for Delta outflows, Delta Cross Channel Gate closures and export limits (fish & wildlife requirements)
- **Modified Orders- March 5, April 6, and July 3:** Further modified Delta outflows, export limits and included new modifications to San Joaquin River and Rio Vista flows (fish & wildlife requirements) and Western Delta salinity (agricultural requirement)

Required Findings for TUCP

- Urgent need for change
- No injury to other lawful users of water
- No unreasonable effect on fish, wildlife, or other instream beneficial uses
- Change is in the public interest

Protests, Objections and Petitions for Reconsideration

- Ten Petitions for Reconsideration from six petitioners:
 - San Luis & Delta-Mendota Water Authority, Westlands Water District, State Water Contractors
 - Friant Water Authority and members
 - Restore the Delta
 - The Bay Institute (*TUCP Orders and TMP*)
 - San Joaquin River Exchange Contractors Water Authority, Central California Irrigation District, San Luis Canal Co., Columbia Canal Co. and Firebaugh Canal Water District
 - California Sportfishing Protection Alliance, AquAlliance, and CA Water Impact Network (*TUCP Orders and TMP*)
- Protests & Objections: Numerous protests and objections to original TUCP Order and subsequent modifications

Grounds for Reconsideration

- Irregularity in proceedings or abuse of discretion preventing fair hearing
- If Order is not supported by substantial evidence
- There is new relevant evidence which could not have been produced
- Error in law

Overarching Comments

- Changes did not constrain operations enough causing unreasonable impacts to fish & wildlife and other uses of water
- Changes constrained operations too much causing unreasonable impacts to water supplies
- Changes did not reasonably balance competing uses
- The need for the changes resulted from lack of drought planning
- Other legal and procedural issues

Conclusions on TUCP Orders

- TUCP Orders supported based on information available at the time
 - Orders supported by biological reviews and concurrence of fish agencies
 - Intended to preserve water in storage for cold water for winter-run and other fish, water supplies and salinity control
 - Conserved +800,000 acre-feet (af) from changes, allowed 1,500 cubic feet per sec exports or more when not meeting requirements

Conclusions on TMP Approval

- **TMP approval supported based on information available at the time**
 - **April 15:** original TMP approved based on modeling, more water than in 2014, and assurances from Reclamation, despite less of the coldest water than 2014; approval indicated TMP may need to be updated
 - **May 29:** Shasta profiles from April & May provided by Reclamation indicating major reduction in cold water
 - **July 7:** Revised TMP approved attempting to protect winter-run by prolonging cold water supplies, called for lower releases and higher temperatures of 57-58° F
 - **Fall 2015:** juvenile fish monitoring shows high mortality

Conclusions Regarding Future Drought Measures

- Status quo not reasonable going forward and changes needed to:
 - Prevent continued catastrophic fish declines
 - Provide minimal supplies for health and safety
 - Improve accuracy, timeliness, transparency and accountability for drought decision making in 2016

Status of Fish Species

- **Winter-run Chinook:** 2014 and likely 2015 runs experienced nearly complete mortality despite larger 2015 run size
- **Delta smelt:** 2015 lowest summer index and second lowest fall index to date
- **Longfin smelt:** 2015 lowest fall survey with zero fish caught to date
- Other fish also experienced significant mortality including spring, fall and late fall-run Chinook, steelhead, American shad (lowest fall), threadfin shad (7th lowest fall), and age-0 striped bass (2nd lowest fall)

Juvenile Winter Chinook Salmon Estimated Passage

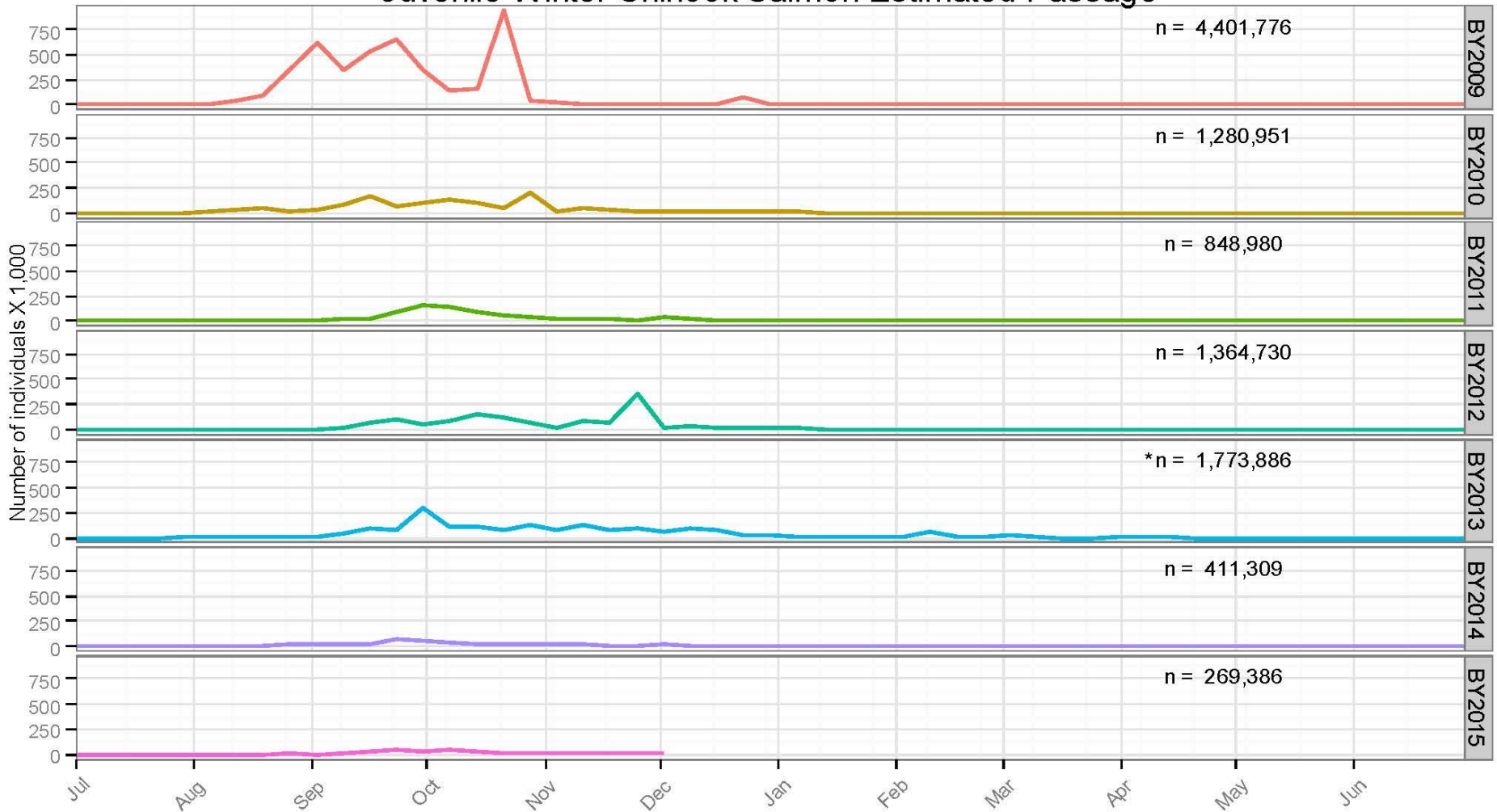


Figure 1. Weekly estimated passage of unmarked juvenile winter Chinook salmon at Red Bluff Diversion Dam (RK391) by brood-year (BY). Fish were sampled using rotary-screw traps for the period July 1, 2009 to present .

*Winter run passage value interpolated using a monthly mean for the period October 1, 2013 - October 17, 2013 due to government shutdown .

Juvenile Spring Chinook Salmon Estimated Passage

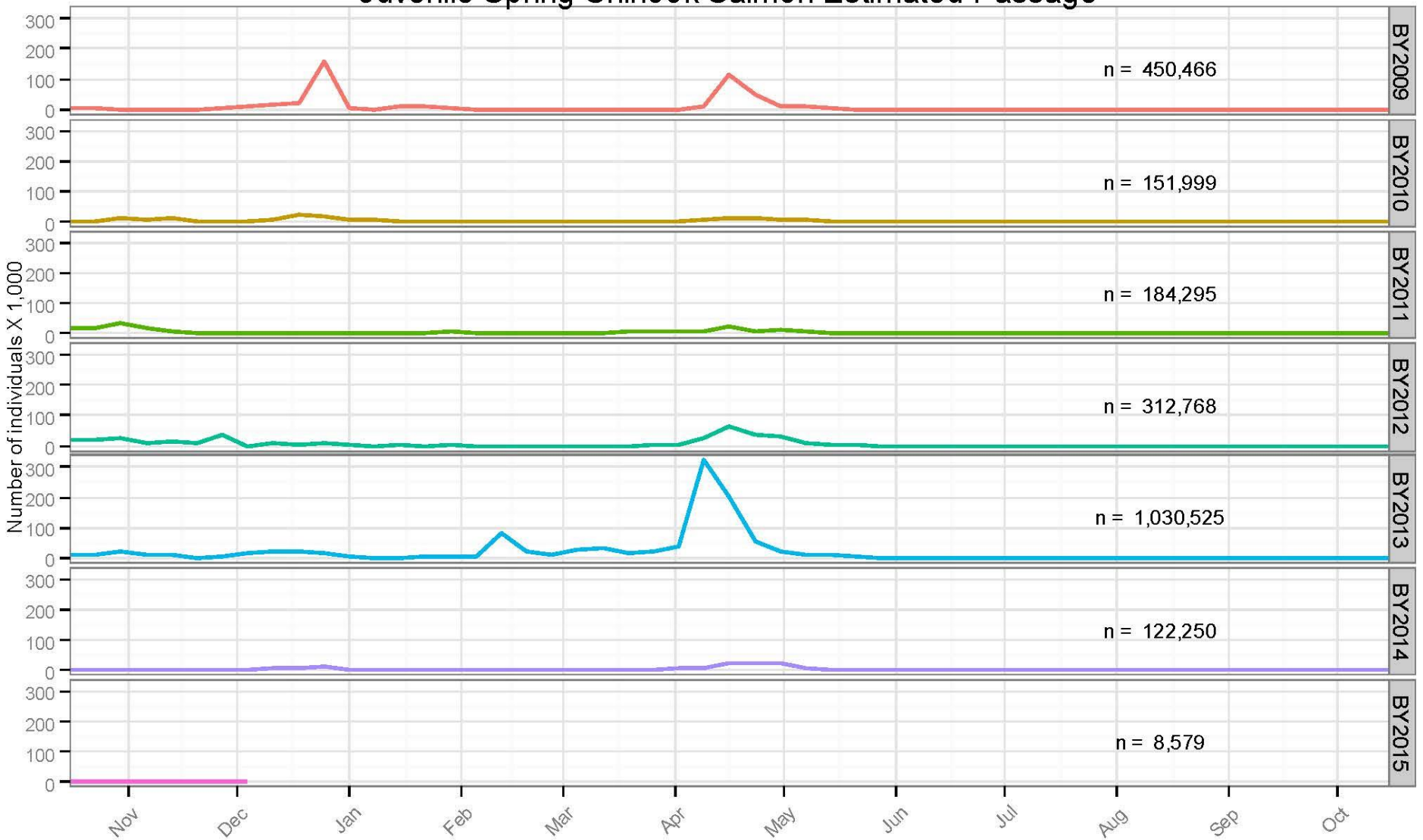


Figure 2. Weekly estimated passage of unmarked juvenile spring Chinook salmon at Red Bluff Diversion Dam (RK391) by brood-year (BY). Fish were sampled using rotary-screw traps for the period October 16, 2009 to present.

Juvenile *Onchorhynchus mykiss* Estimated Passage

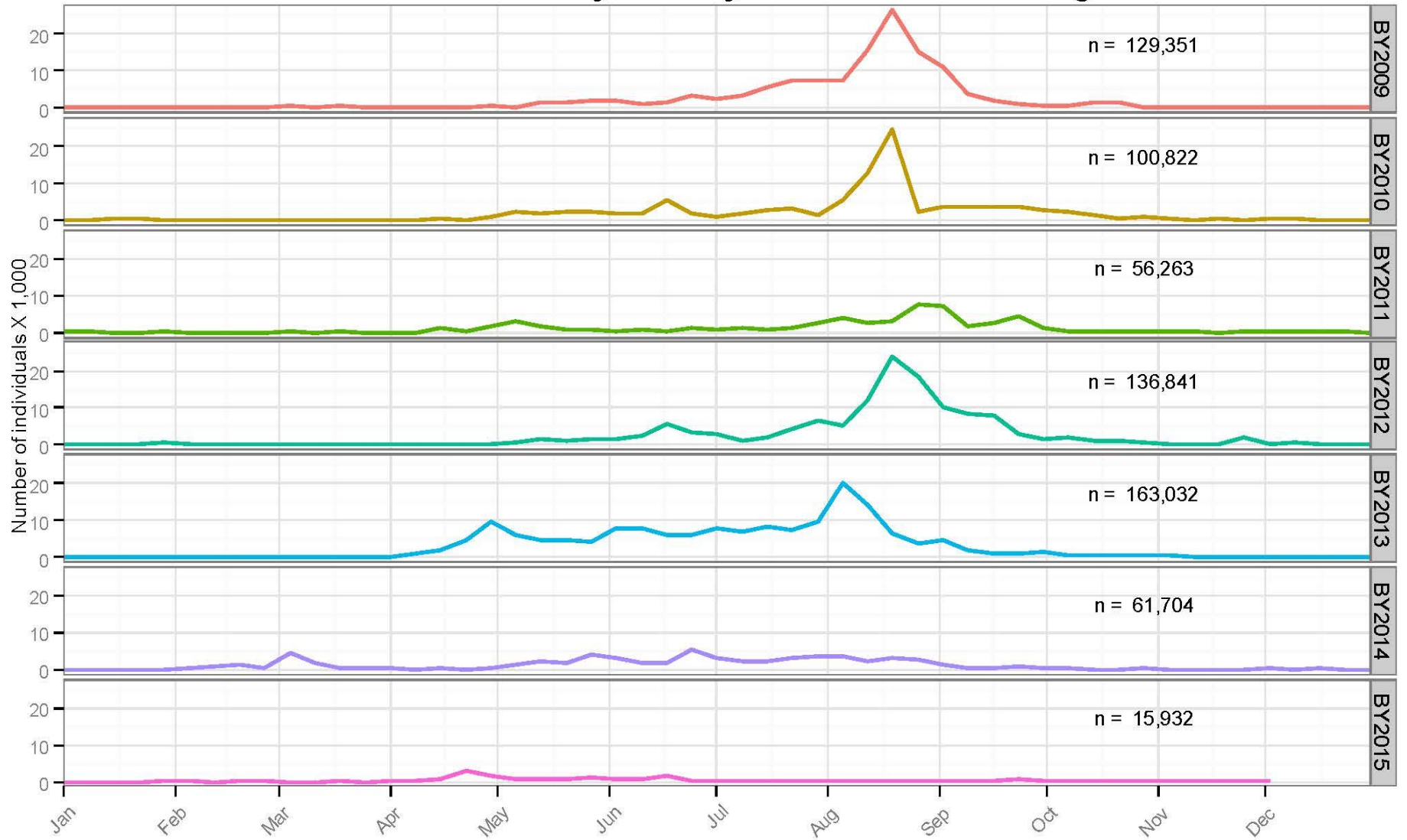


Figure 3. Weekly estimated passage of unmarked juvenile Rainbow/Steelhead trout at Red Bluff Diversion Dam (RK391) by brood-year (BY). Fish were sampled using rotary-screw traps for the period January 1, 2009 to present .

Juvenile Fall Chinook Salmon Estimated Passage

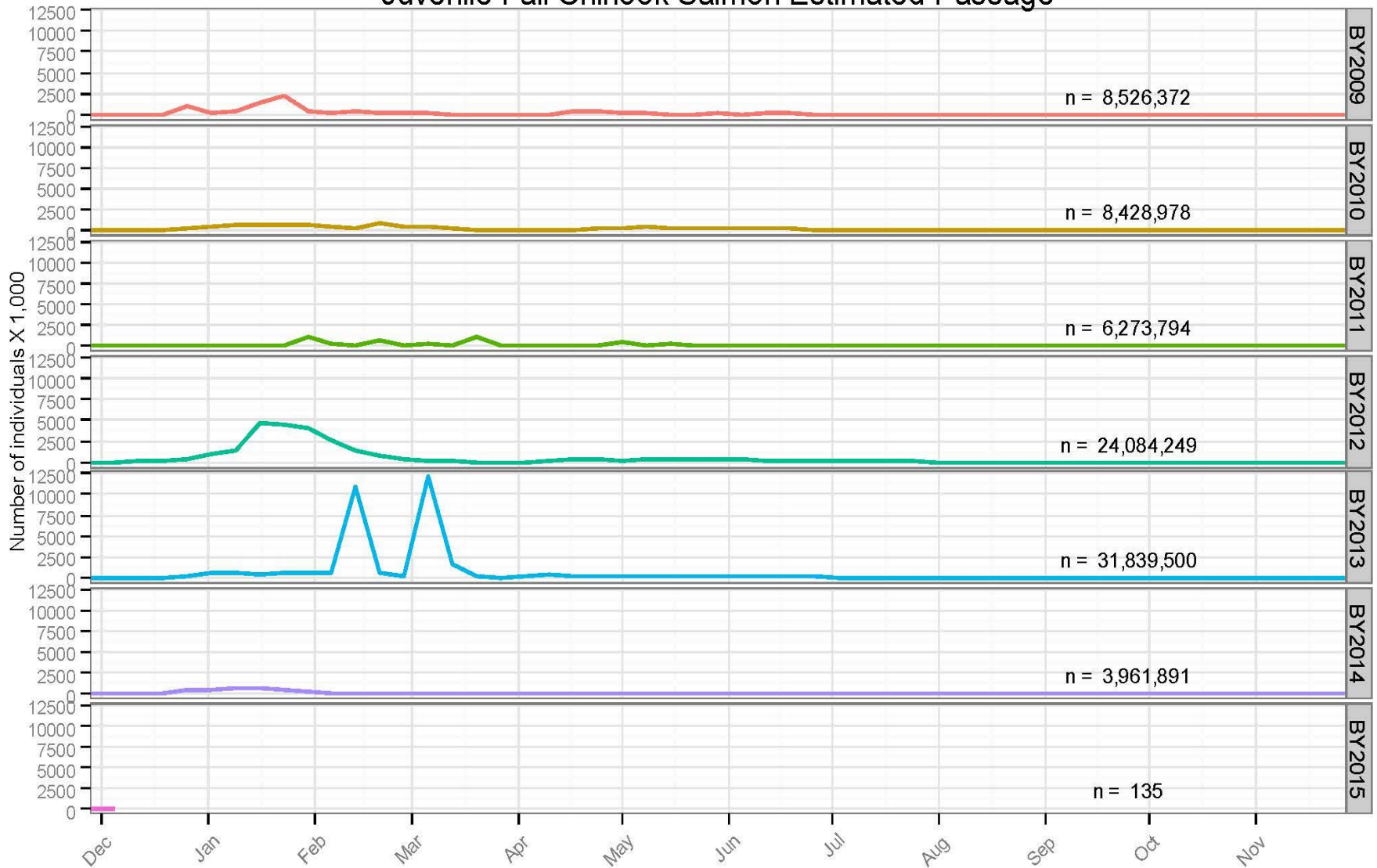


Figure 4. Weekly estimated passage of unmarked juvenile fall Chinook salmon at Red Bluff Diversion Dam (RK391) by brood-year (BY). Fish were sampled using rotary-screw traps for the period December 1, 2009 to present.

Juvenile Late Fall Chinook Salmon Estimated Passage

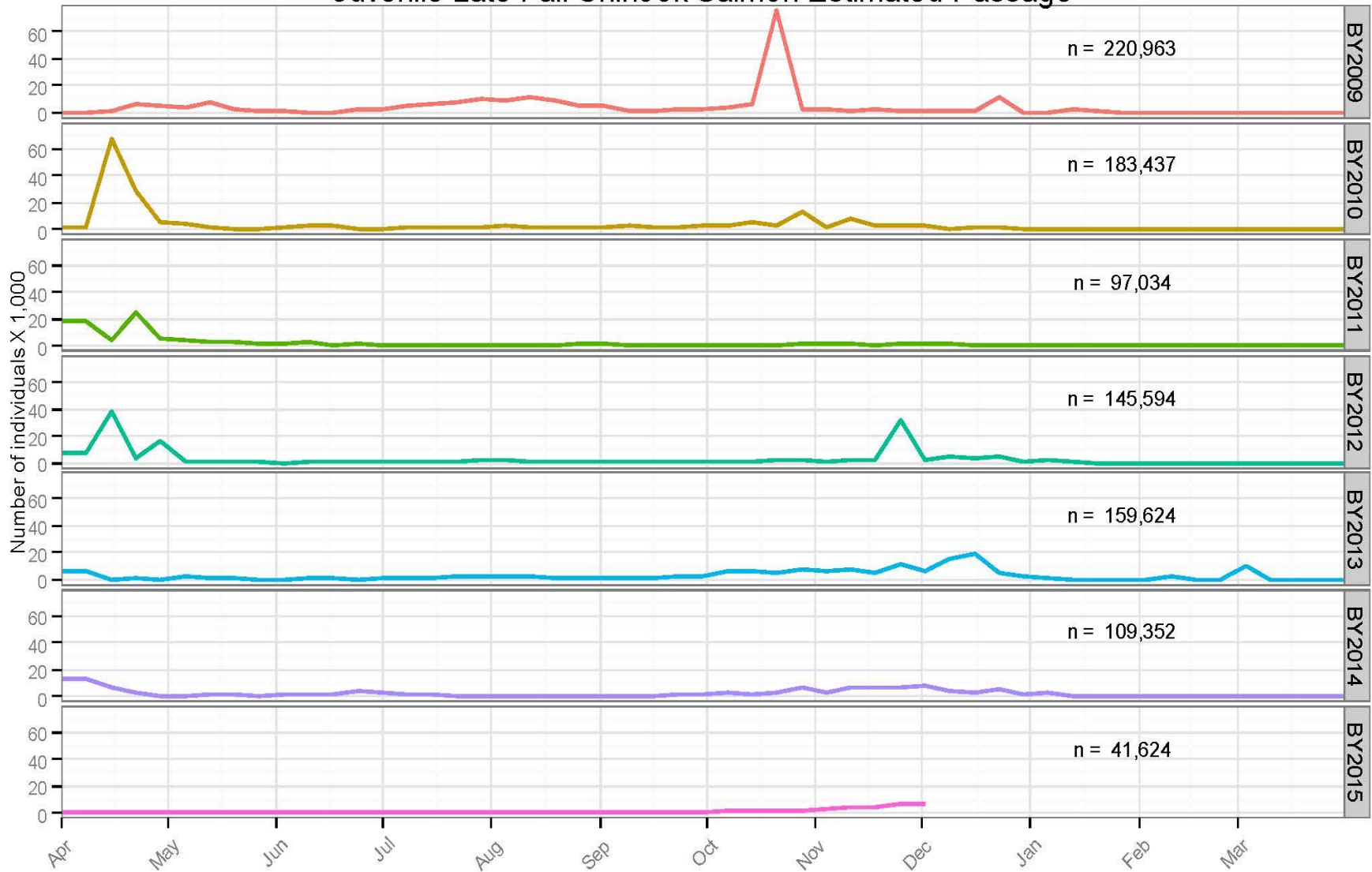


Figure 5. Weekly estimated passage of unmarked juvenile late fall Chinook salmon at Red Bluff Diversion Dam (RK391) by brood-year (BY). Fish were sampled using rotary-screw traps for the period April 1, 2009 to present .

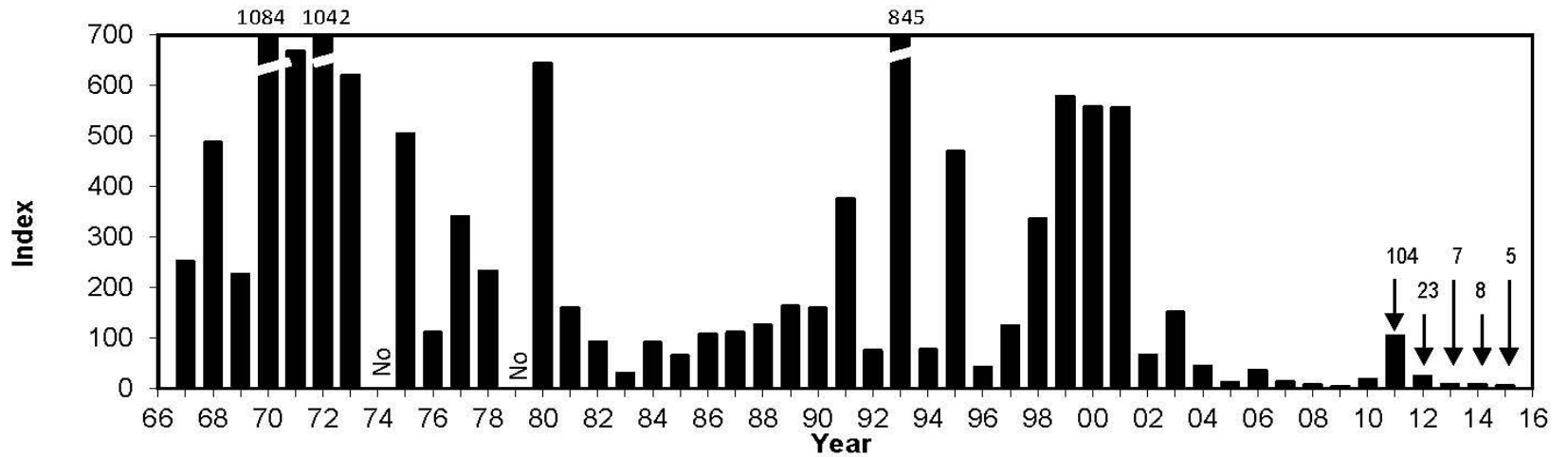


Figure 1. FMWT Delta Smelt September-October abundance indices, 1967-2015.

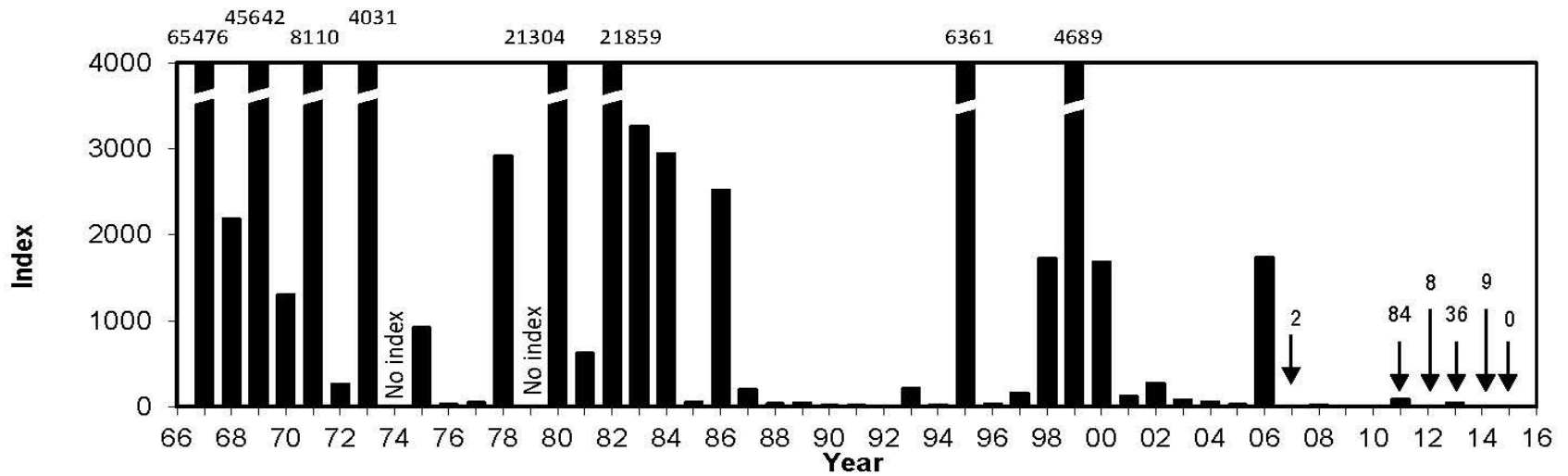


Figure 3. FMWT Longfin Smelt September-October abundance indices, 1967-2015.

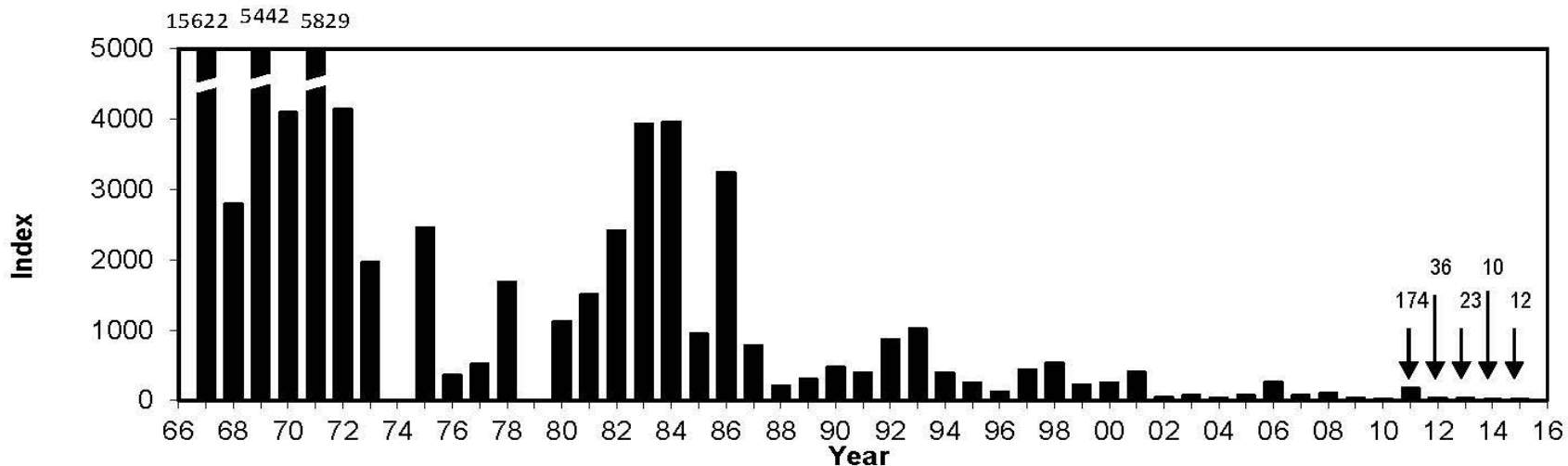


Figure 2. FMWT Age-0 Striped Bass September-October abundance indices, 1967-2015.

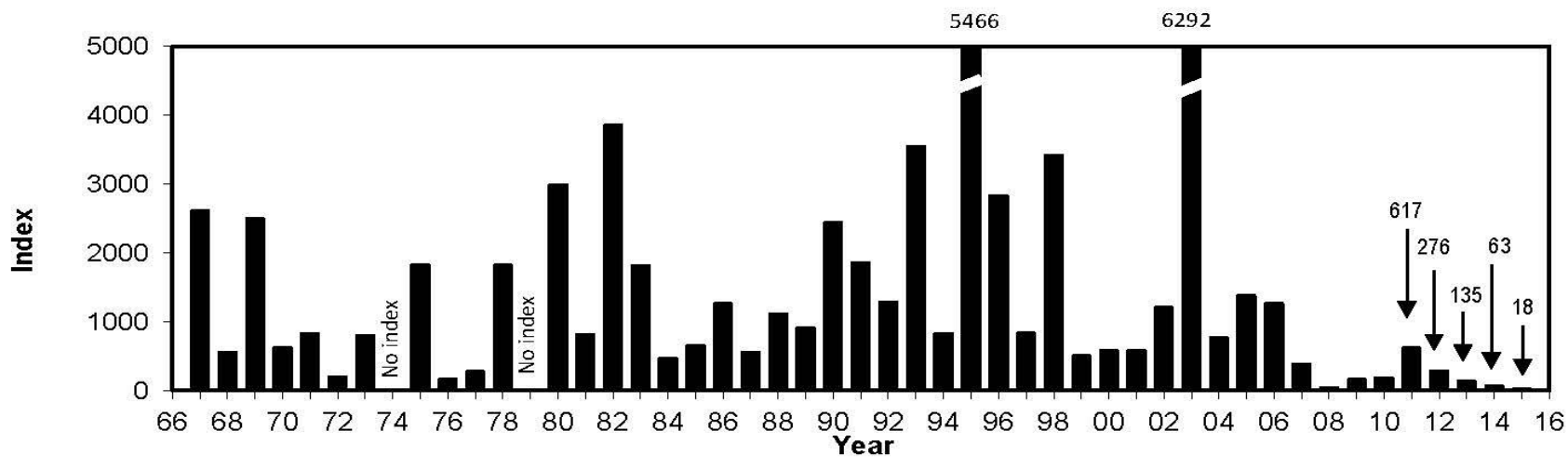
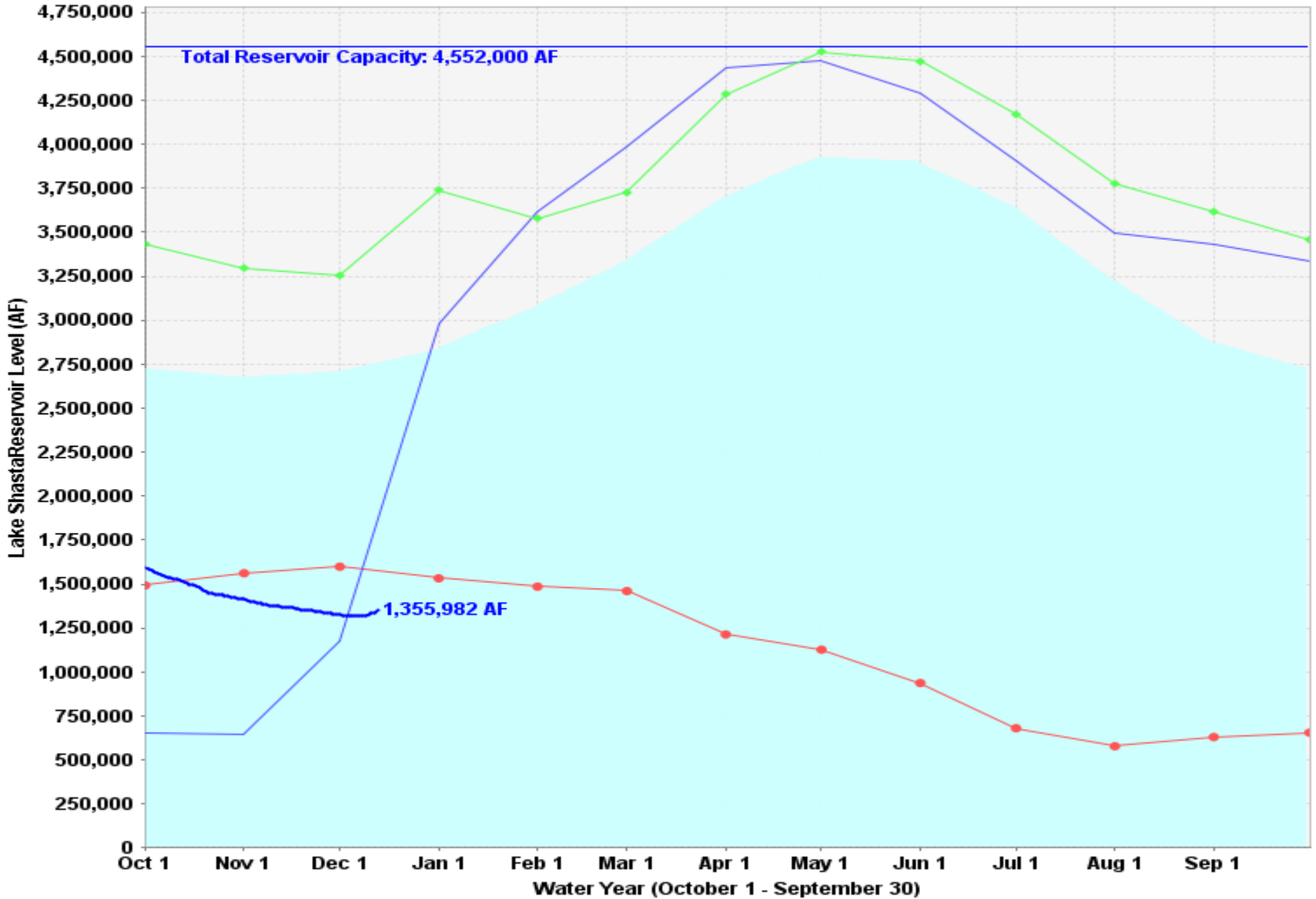


Figure 5. FMWT American Shad September-October abundance indices, 1967-2015.

Storage Conditions

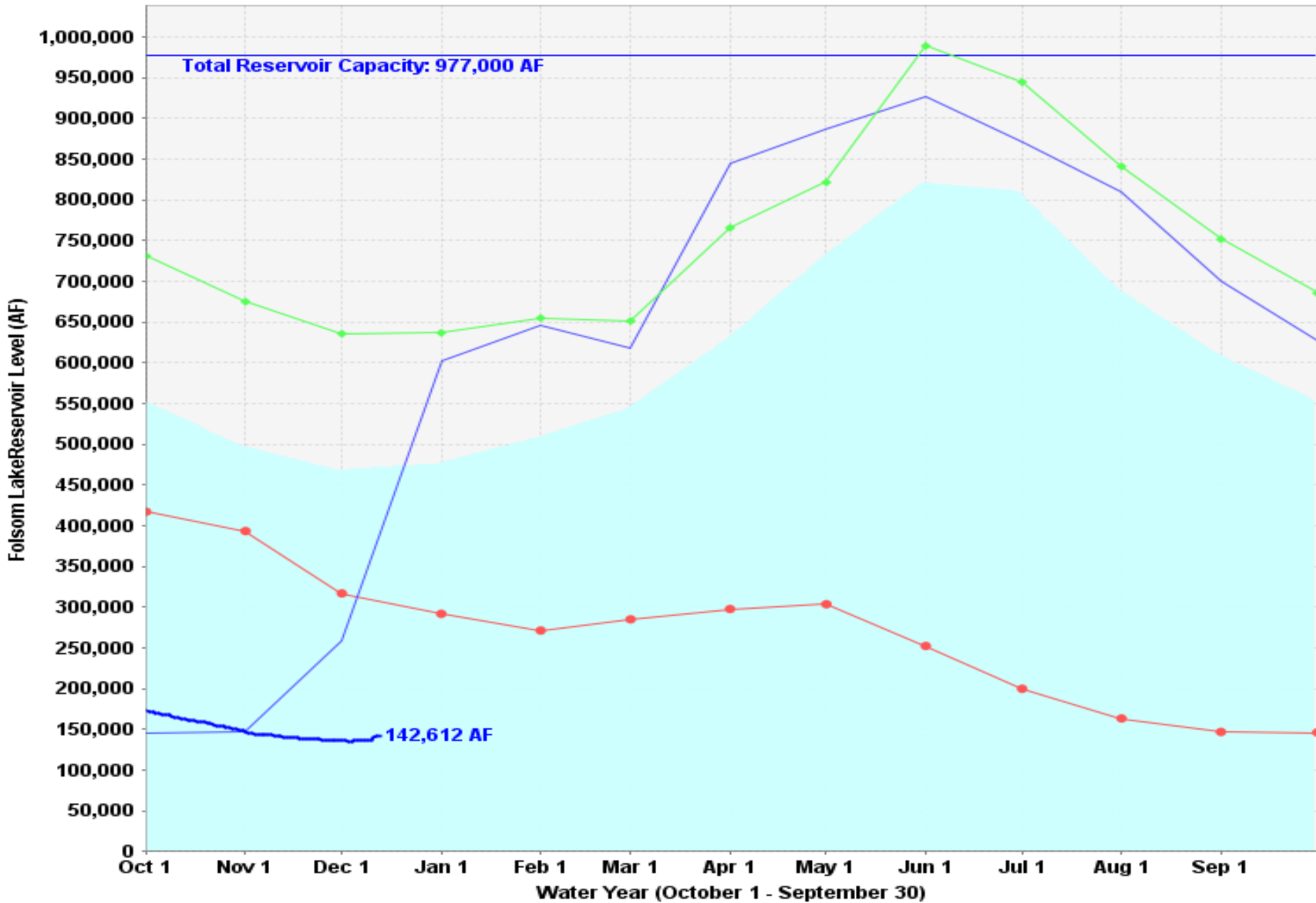
Reservoir Name	12/13/15 Reservoir Storage (AF)	% Capacity	% December Average
Shasta	1,355,982	30%	48%
Oroville	923,895	26%	43%
Folsom	142,612	15%	30%
New Melones	274,240	11%	20%

Lake Shasta Storage Levels



Historical Average — Total Reservoir Capacity — 1976-1977 (dry) — 1977-1978 — 1982-1983 (wet) — 2015-2016(current)

Folsom Lake Storage Levels



■ Historical Average
 — Total Reservoir Capacity
 ● 1976-1977 (dry)
 — 1977-1978
 ● 1982-1983 (wet)
 — 2015-2016(current)

Draft Order Conditions: Drought Contingency Plan

- February-October 2016 plan with margin of safety for fish & wildlife, input from fish agencies, minimum H&S supplies
 - Monthly updates
 - Retrospective of 2014 and 2015
 - Planned flows and storage levels at 50, 90 and 99% hydrologies
 - Monitoring, evaluation and reporting plan

Draft Order Conditions: Sacramento River TMP Issues

- Ensure winter-run protection, no redirected impacts to Trinity, Clear Creek, other runs
 - End October storage: 1.6 million af or alternate measures to ensure protection
 - Consultation, modeling, monitoring, reporting: plan for accurate, timely, transparent, consistent and comparable temperature modeling; reservoir profiles; evaluation of 2015 issues and remedies

Other Draft Order Conditions

- Folsom operations plan to ensure protection of M&I supplies, fish & wildlife
 - End October storage of 200,000 af
- Stanislaus River operations plan to protect fish & wildlife
- Continued consultation with fish agencies and State Water Board

Public Comments on Draft Order

- Anderson Cottonwood I.D.
- The Bay Institute
- Natural Resources Defense Council
- Defenders of Wildlife
- Department of Water Resources
- CA Sportfishing Protection Alliance
- CA Water Impact Network
- AquAlliance
- City of Folsom
- City of Roseville
- San Juan Water District
- Friant Water Authority
- M & T Chico Ranch
- San Joaquin River Exchange Cont.
- Plumas Mutual Water Co.
- Porgans & Ass. Planetary Solutionaries
- Reclamation District No. 1004
- Restore the Delta
- Richvale I.D., Biggs-West Gridley W. D., Butte W.D., and Sutter Extension W.D.
- San Luis & Delta Mendota Water Auth.
- Westlands W.D.
- Sierra Club California
- South Delta Water Agency
- State Water Contractors
- U.S. Bureau of Reclamation
- Western Canal Water District
- Modesto I.D.
- Northern California Water Ass.

Questions?