# IDENTIFYING INDIVIDUALS FROM PROTECTED POPULATIONS 

GENETIC ASSIGNMENT OF CHINOOK SALMON - WY 2023

## PRESENTER SCOTT BLANKENSHIP PH.D.

## WHY CONDUCT POPULATION ASSIGNMENT?

PERMIT COMPLIANCE

CLASSIFICATION ACCURACY

SWP Incidental Take Permit minimization measures
Annual winter loss $=1.17 \%$ winter run JPE
Monthly older loss = Jan 0.00635\% winter JPE
Feb 0.00991\% winter JPE
Mar 0.0146\% winter JPE
Apr 0.00507\% winter JPE
May 0.0077\% winter JPE

## WHY CONDUCT POPULATION ASSIGNMENT?

PERMIT COMPLIANCE

CLASSIFICATION ACCURACY


## HOW IS POPULATION ASSIGNMENT CONDUCTED?

| Reference |
| :--- |
| genetic baseline |

```
Unknown origin
samples
```



## POPULATION ASSIGNMENT

Total Salvage $=5,150$
"older" $=25$
Winter ESU = 1



## Delta Juvenile fish monitoring

| MSR | 2023 | SEINE |
| :--- | :--- | :--- |
| LSR | 2023 | KODIAK TRAWL |
| LSR | 2023 | MIDWATER TRAWL |
| LSR | 2023 | SEINE |
| DLC | 2023 | MIDWATER TRAWL |
| DLC | 2023 | SEINE |
| AMR | 2023 | SEINE |
| MOK | 2023 | SEINE |
| SJR | 2023 | KODIAK TRAWL |
| SJR | 2023 | SEINE |
| SPB | 2023 | SEINE |



Sacramento Trawl (Kodiak Trawl) 2023



## SALVAGE

## STOCK PROPORTIONS

|  | Total Count |  |
| :---: | :---: | :---: |
|  | CVP | SWP |
| Assignment Category | 4173 | 667 |
| LAD Winter ESU | Count Proportion |  |
| LAD Spring ESU | $0.3 \%$ | $0.9 \%$ |
| LAD Fall/LF ESU | $44.0 \%$ | $60.7 \%$ |
| LAD unknown | $55.5 \%$ | $38.4 \%$ |
| Genetic Winter ESU | $0.2 \%$ | $0.0 \%$ |
| Genetic Spring ESU | $0.0 \%$ |  |
| Genetic Fall/LF ESU | $0.4 \%$ | $0.0 \%$ |
| Unassigned | $99.6 \%$ | $0.7 \%$ |




## WATER YEAR 2024

## POPULATION ASSIGNMENT

To Date Salvage = 1,329
"older" $=408$
Winter ESU = 23


## Reintroduction

- Predation
- Release strategies

LSNFS Brood
Parentage

- RBDD
- Boat survey
- Yolo Bypass
- Trawls
- Salvage


