

Fish Salvage Status and Trends

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California Dept. Fish and Game

➤ **Species Composition**

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➤ **Seasonality**

- **Species Composition**
- **Seasonality**
- **Species Salvage Trends / Factors**

- **Species Composition**
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- **Species Salvage Trends / Factors**
- **Seasonality by Species**

- **Species Composition**
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- **Species Salvage Trends / Factors**
- **Seasonality by Species**
- **Salvage vs. Entrainment**

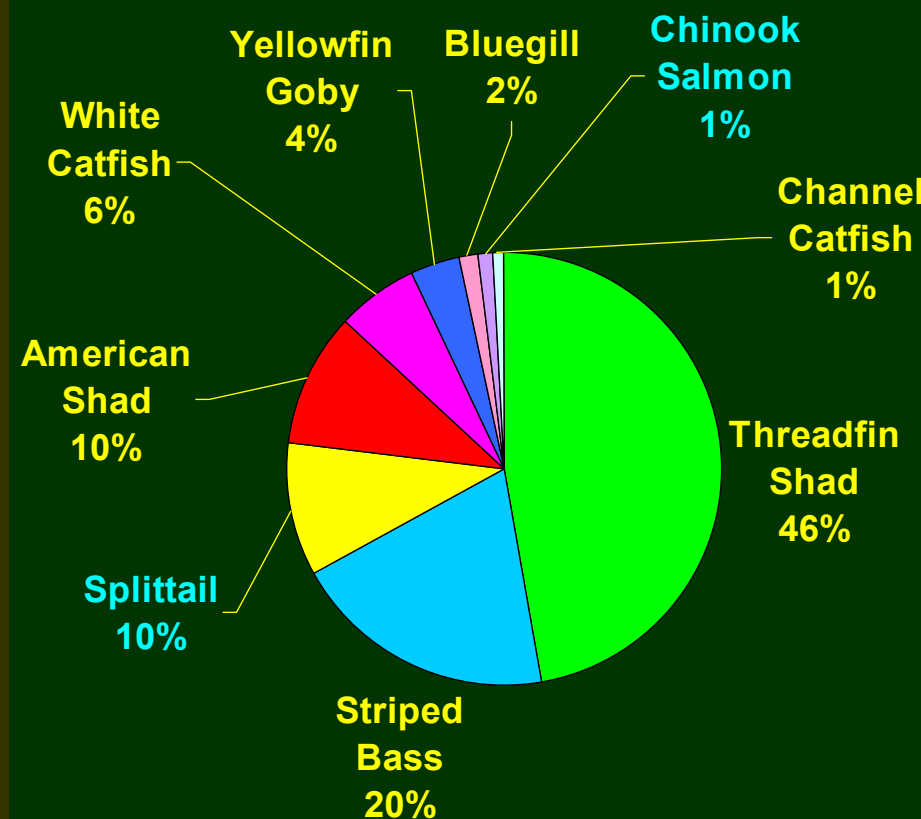
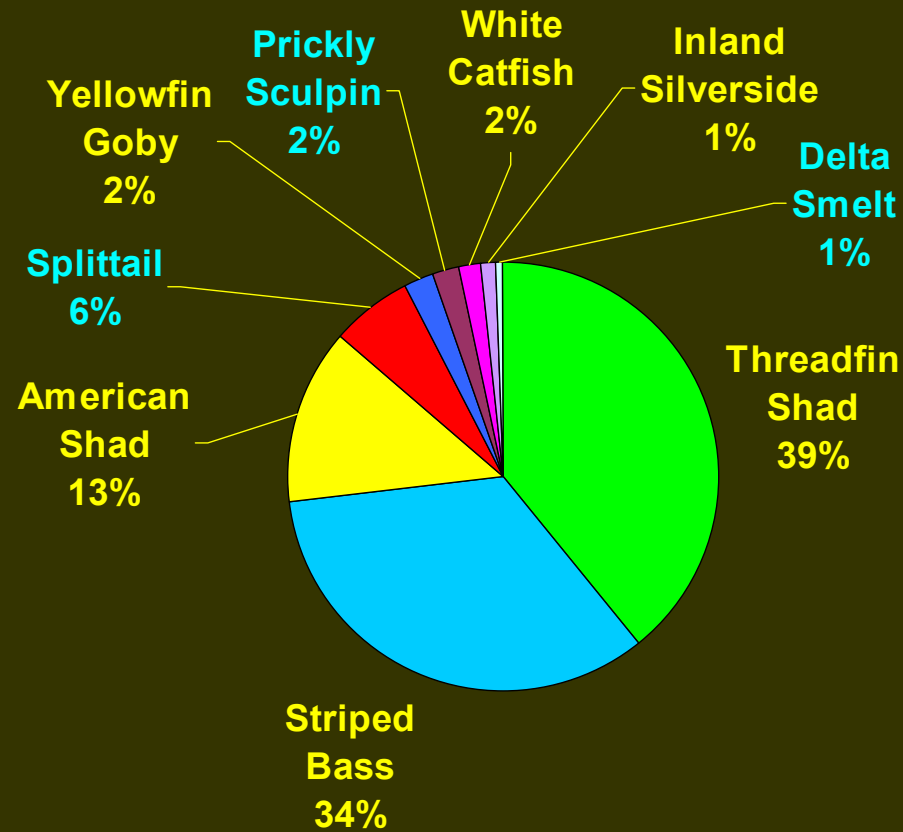
<u>Species</u>	<u>Annual Average</u>	<u>% Salvage</u>
Threadfin Shad	4,837,028	42.074
Striped Bass	3,027,198	26.332
American Shad	1,312,787	11.419
Splittail	893,847	7.775
White Catfish	442,697	3.851
Yellowfin Goby	322,131	2.802
Prickly Sculpin	130,556	1.136
Bluegill	97,209	0.846
Chinook Salmon	80,771	0.703
Inland Silverside	75,099	0.653
Channel Catfish	60,873	0.529
Delta Smelt	52,992	0.461
Largemouth Bass	50,647	0.441
Common Carp	29,642	0.258
Black Crappie	13,484	0.117
Longfin Smelt	11,647	0.101
Chameleon Goby	11,039	0.096
Sacramento Blackfish	8,982	0.078
Bigscale Logperch	8,649	0.075
Golden Shiner	6,973	0.061
Steelhead Trout	5,856	0.051

<u>Species</u>	<u>Annual Average</u>	<u>% Salvage</u>
Lamprey Spp.	5,144	0.045
Redear Sunfish	1,949	0.017
Shimofuri Goby	1,723	0.015
Brown Bullhead	1,093	0.010
Western Mosquitofish	1,033	0.009
Warmouth	763	0.007
Tule Perch	755	0.007
Sacramento Sucker	480	0.004
Green Sunfish	363	0.003
Wakasagi	330	0.003
Pacific Staghorn Sculpin	309	0.003
Starry Flounder	298	0.003
White Sturgeon	262	0.002
White Crappie	224	0.002
Riffle Sculpin	212	0.002
Threespine Stickleback	205	0.002
Sacramento Pikeminnow	165	0.001
Goldfish	161	0.001
Black Bullhead	151	0.001
Rainwater Killifish	115	0.001
Smallmouth Bass	103	0.001
Blue Catfish	80	0.001
Hardhead	75	0.001
Green Sturgeon	72	0.001

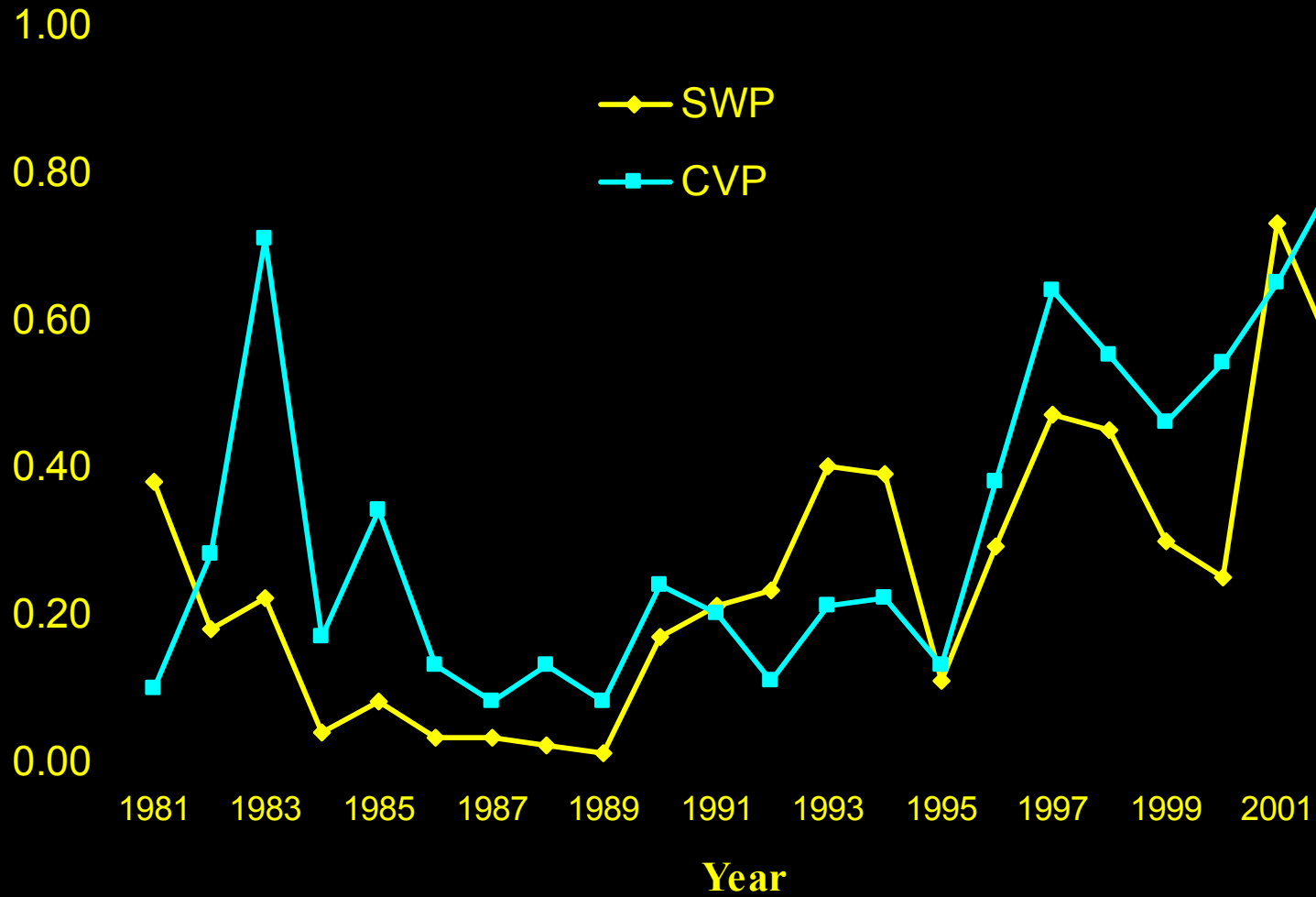
Salvage Relative Species Composition 1993-2002

SWP

CVP



Proportion of threadfin shad in total salvage



Monthly Mean Salvage and Mean Exports 1993-2002

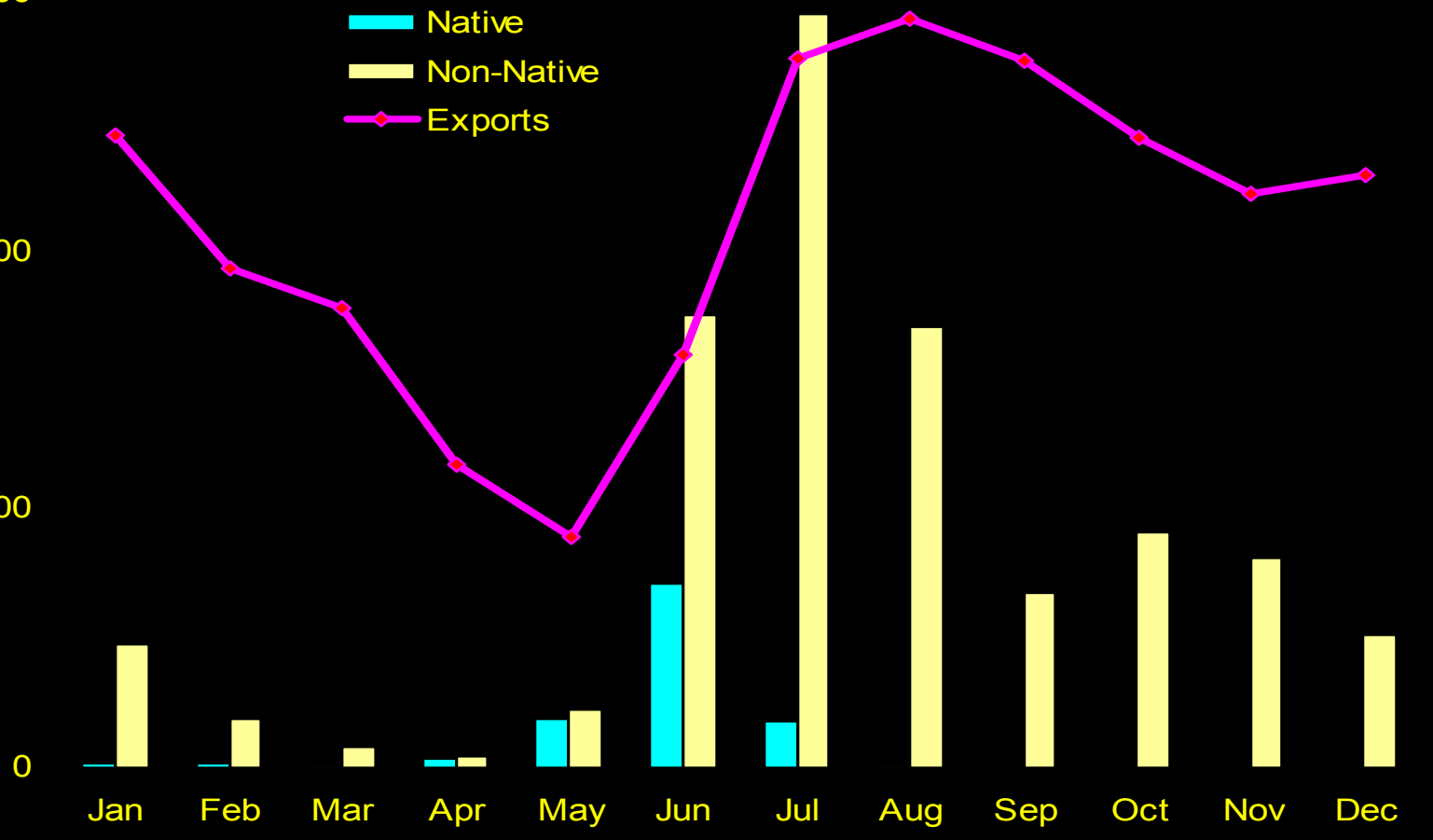
Salvage

Exports

3,000,000
2,000,000
1,000,000
0

600,000
400,000
200,000
0

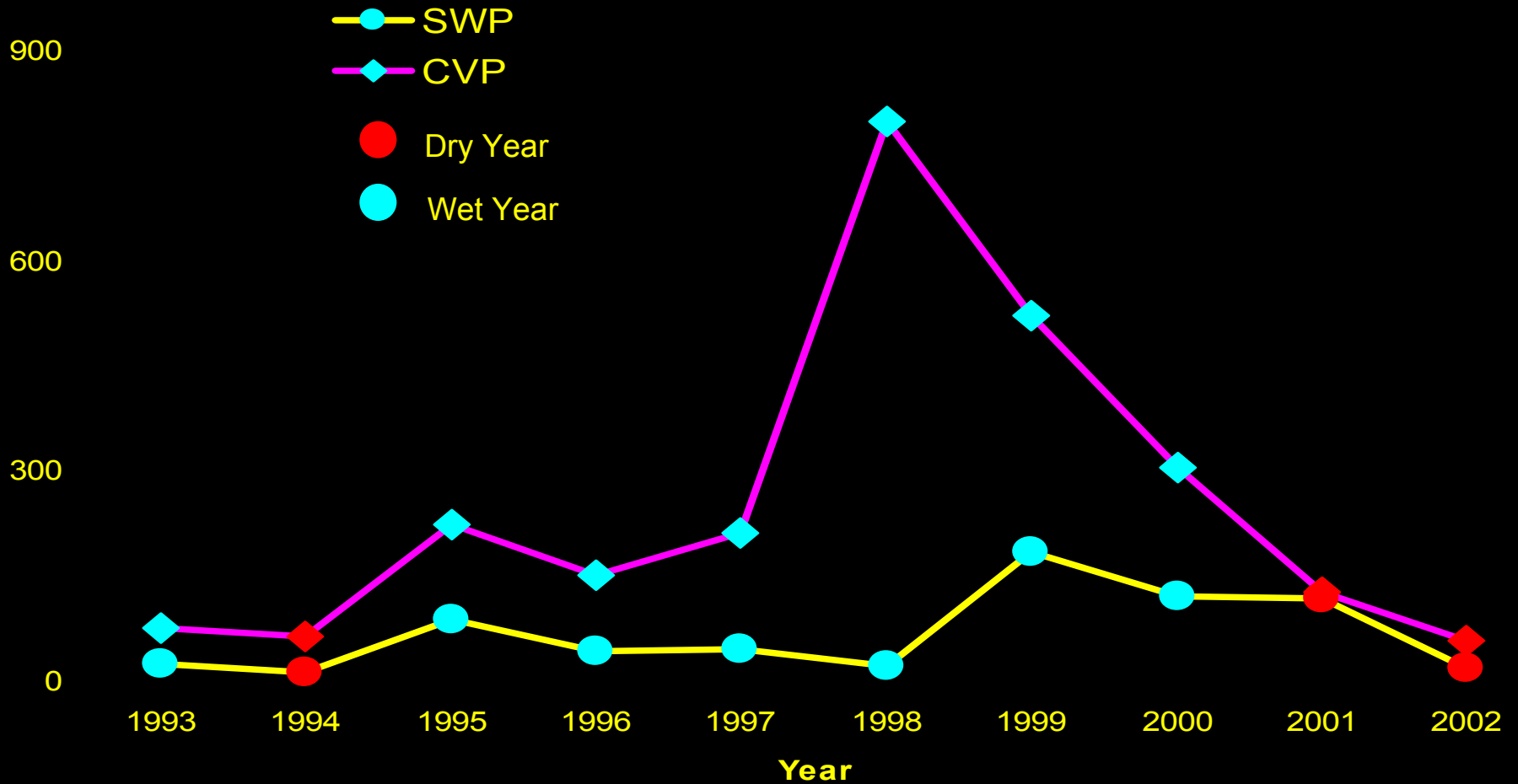
Native
Non-Native
Exports



Month

Annual Chinook Salmon Salvage Density 1993-2002

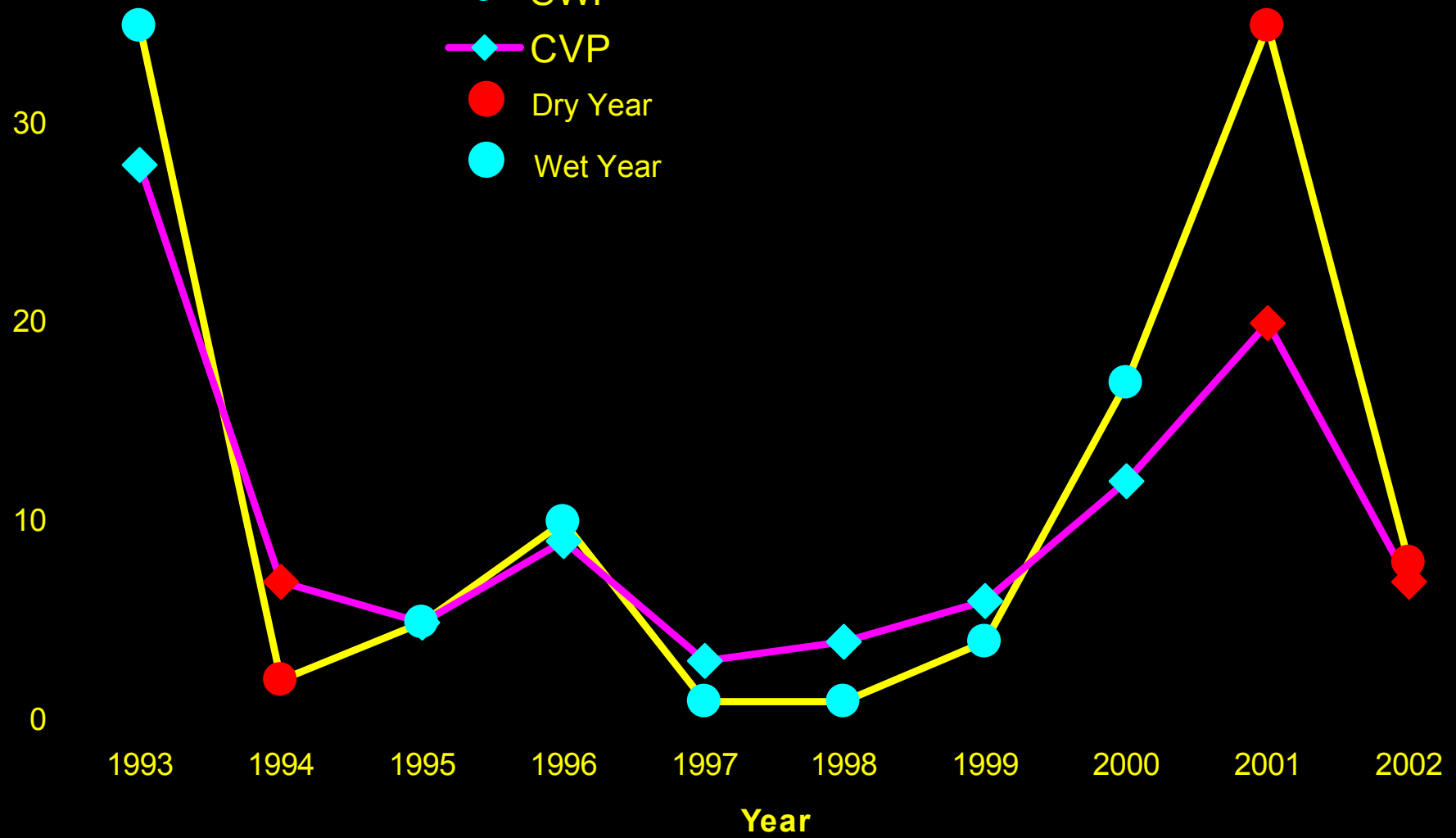
Salvage Density
(Fish/ 10,000 AF)



Annual Steelhead Salvage Density 1993-2002

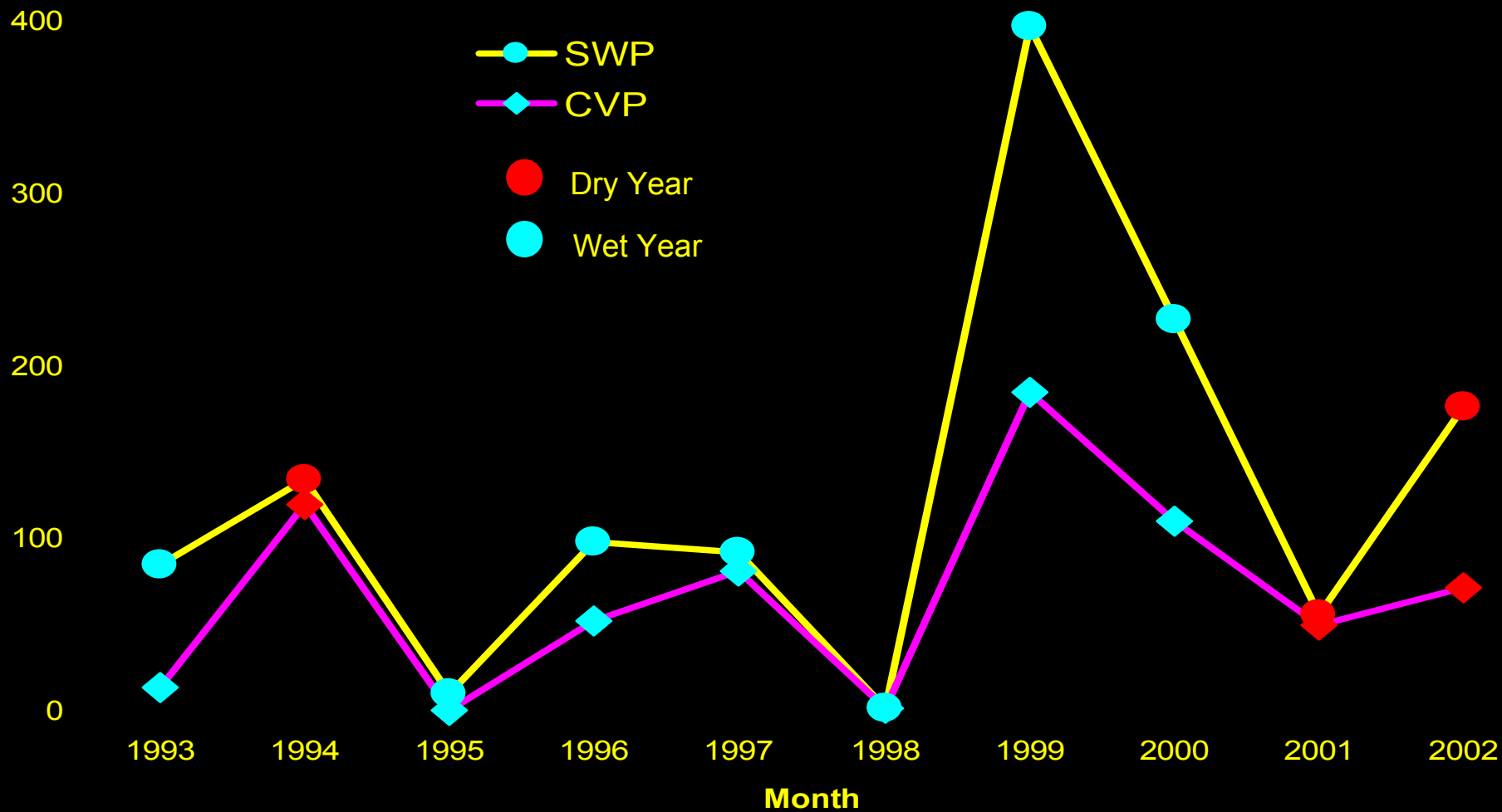
Salvage Density
(Fish/ 10,000 AF)

- SWP
- ◆ CVP
- Dry Year
- Wet Year



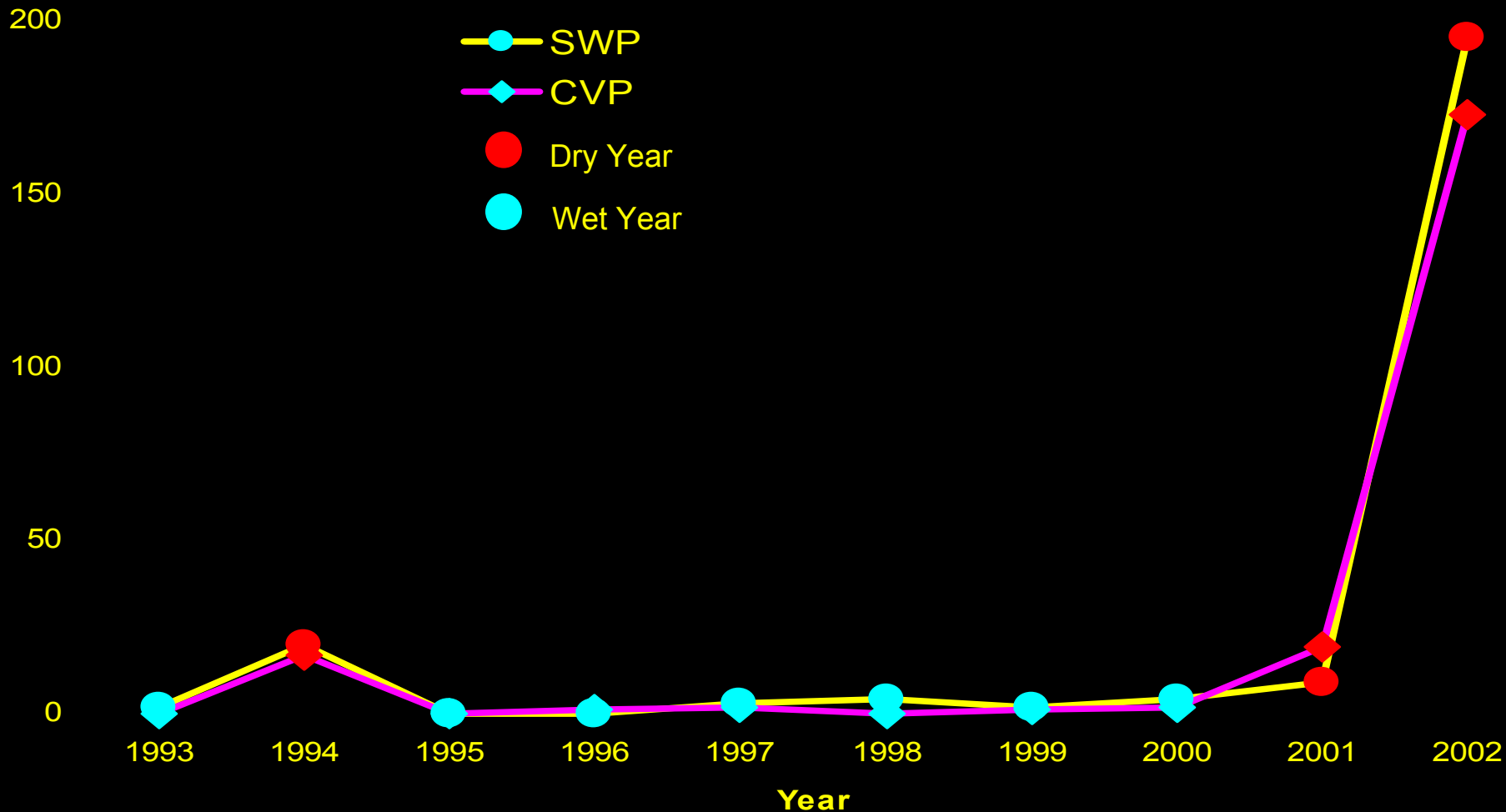
Annual Delta Smelt Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)

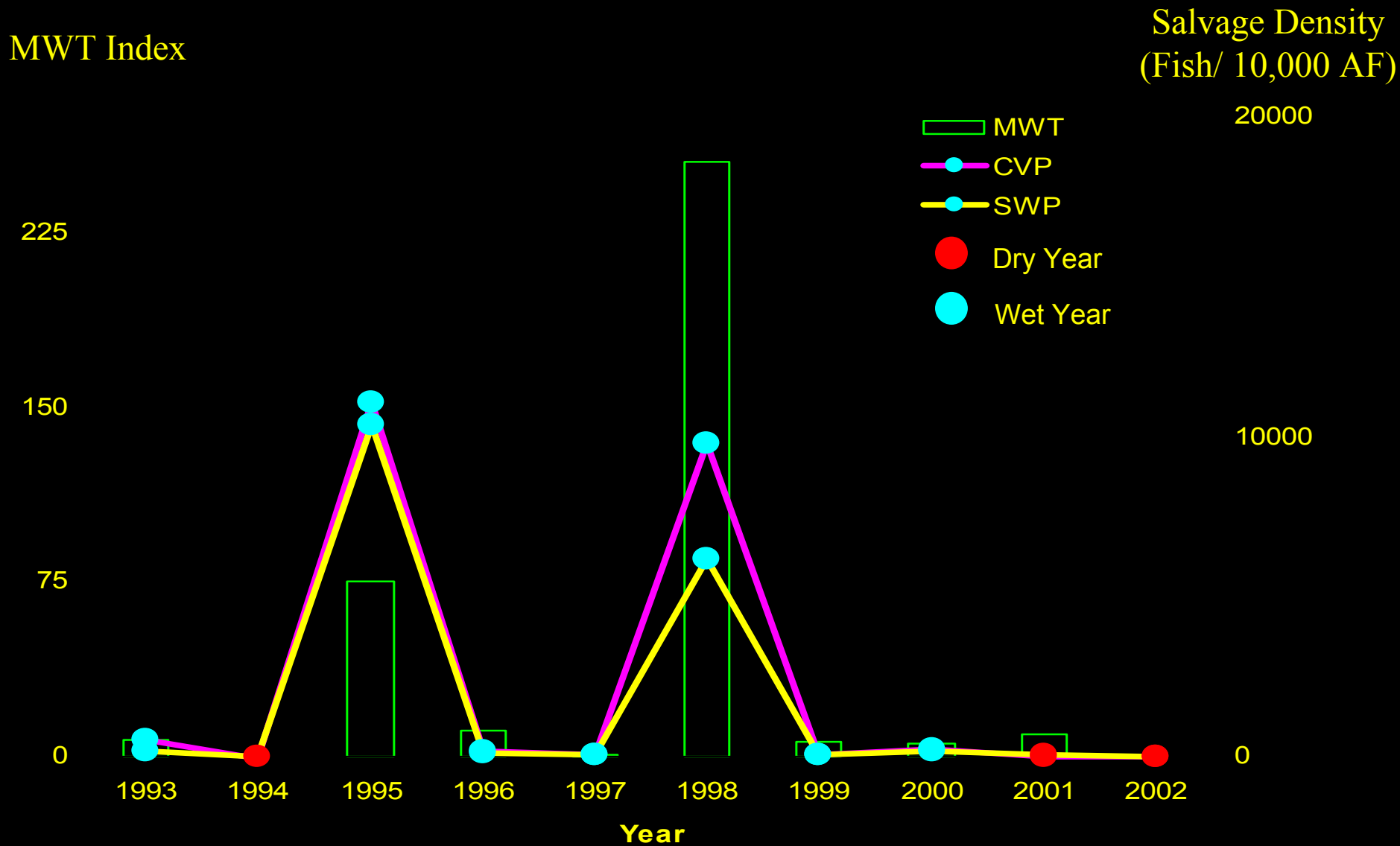


Annual Longfin Smelt Salvage Density 1993-2002

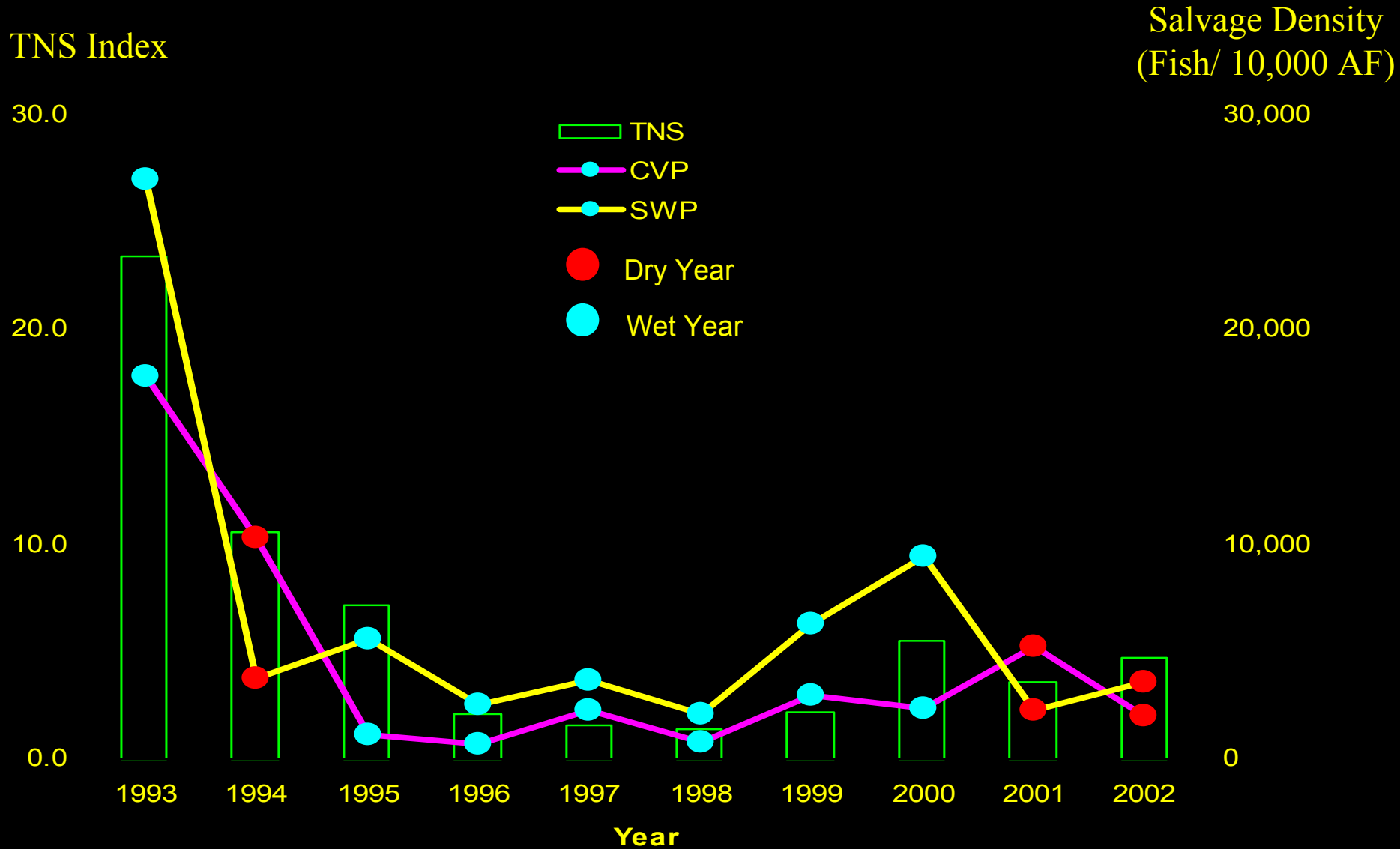
Salvage Density
(Fish/ 10,000 AF)



Annual Splittail Salvage Density and MWT Index 1993-2002



Annual Striped Bass Salvage Density and Towntet Index 1993-2002



Monthly Chinook Salmon Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)

2000

1500

1000

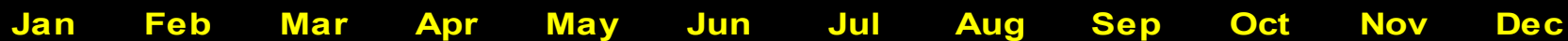
500

0

SWP
CVP

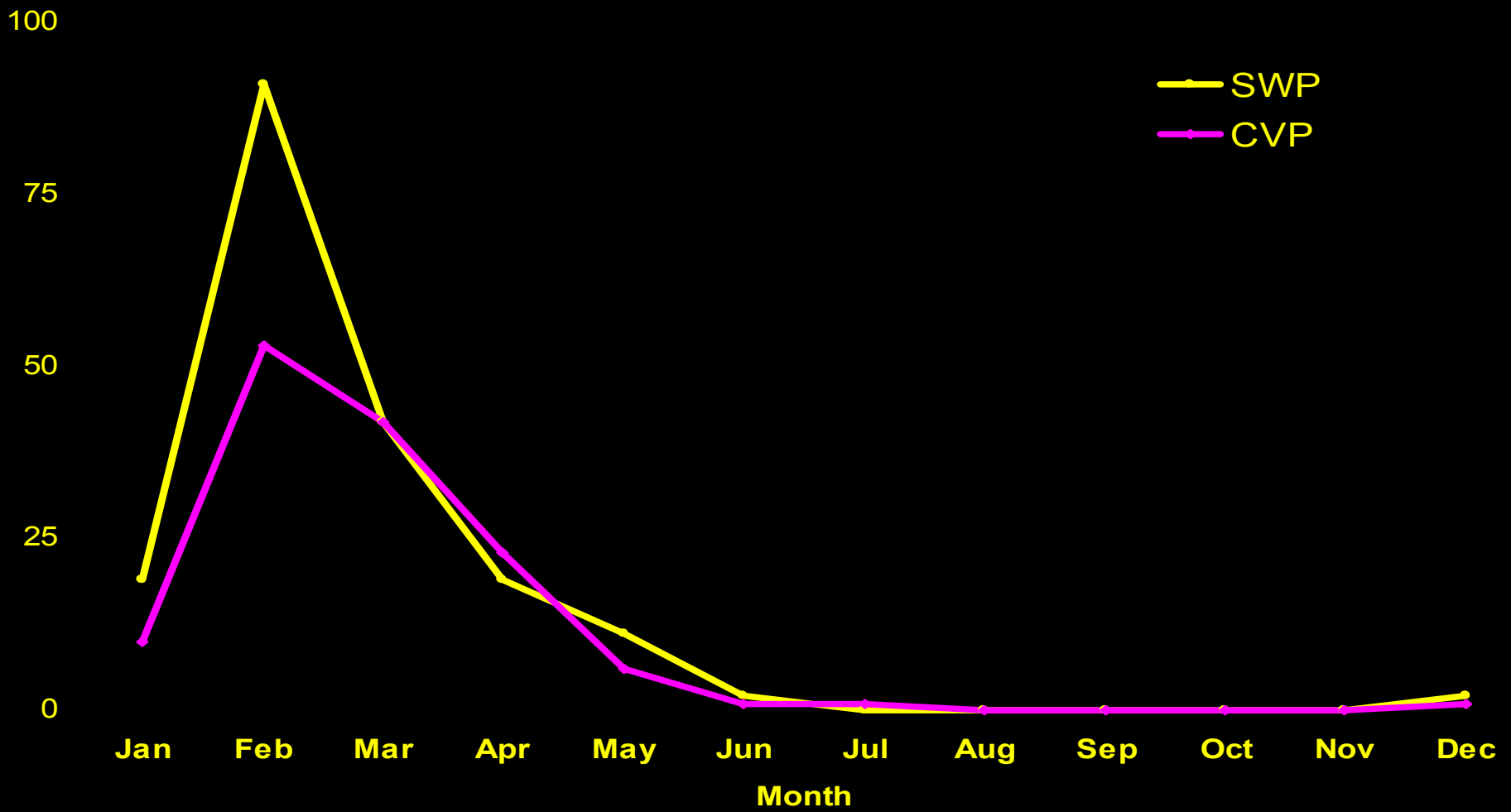
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Month



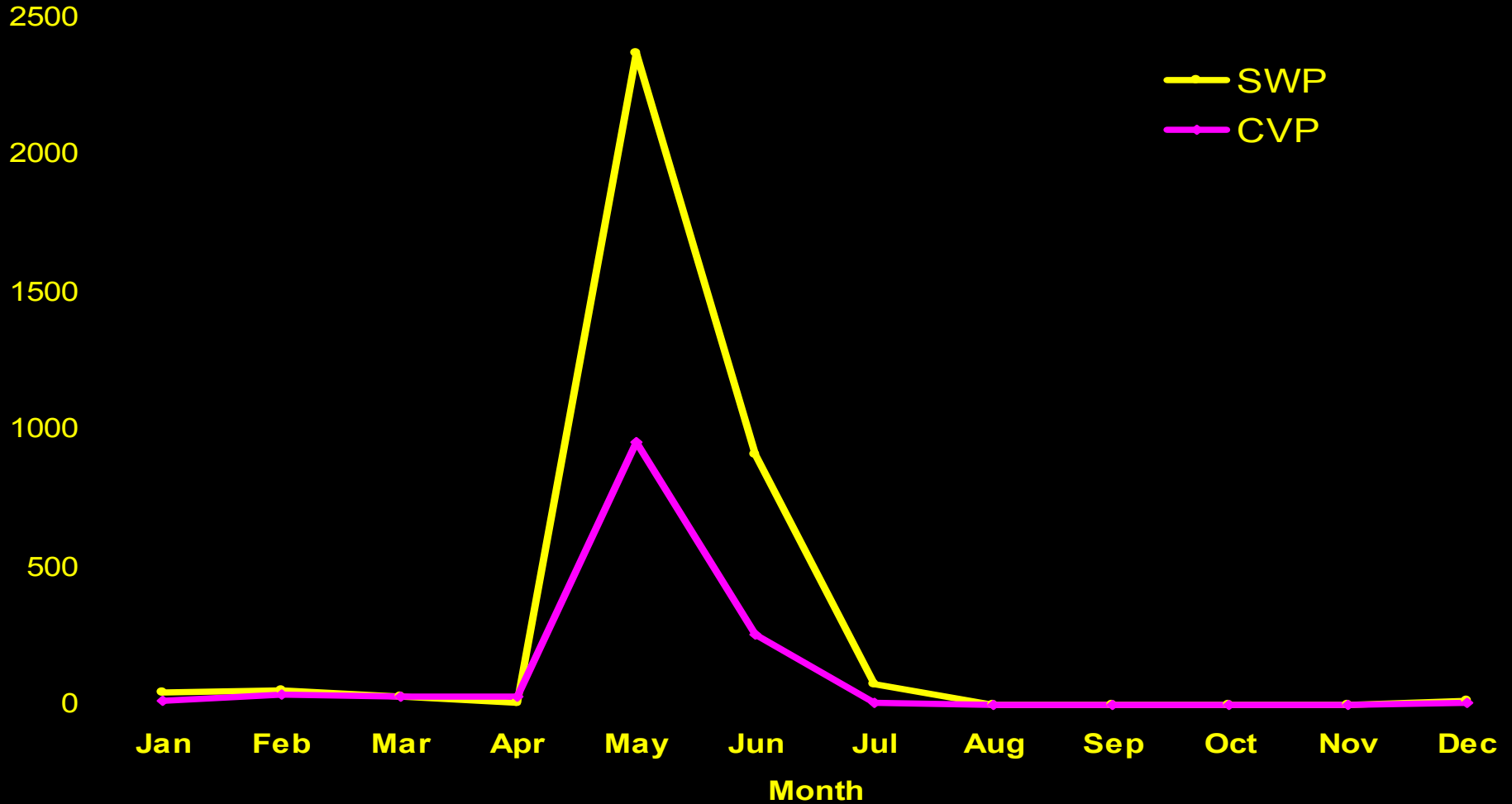
Monthly Steelhead Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)



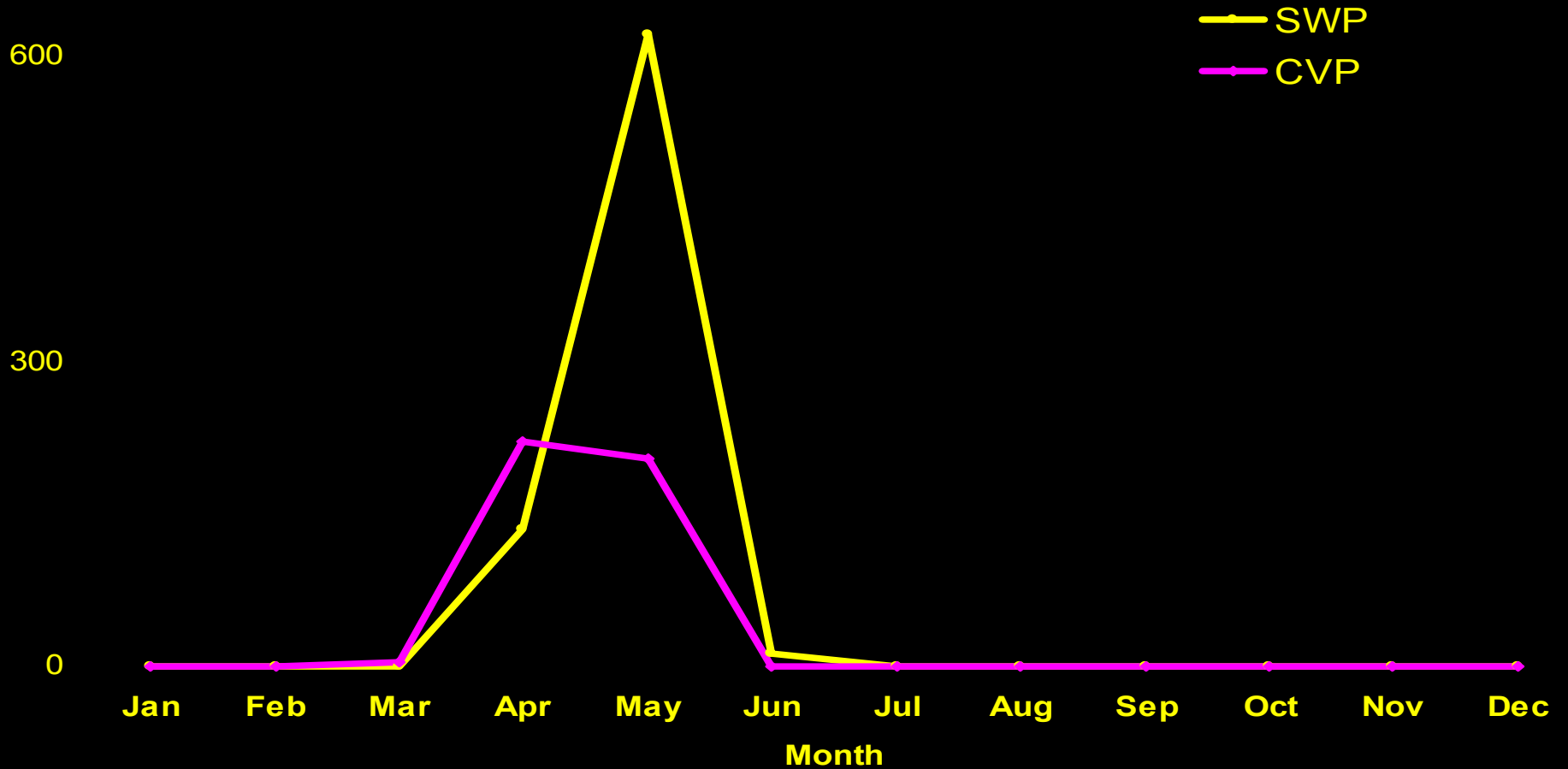
Monthly Delta Smelt Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)



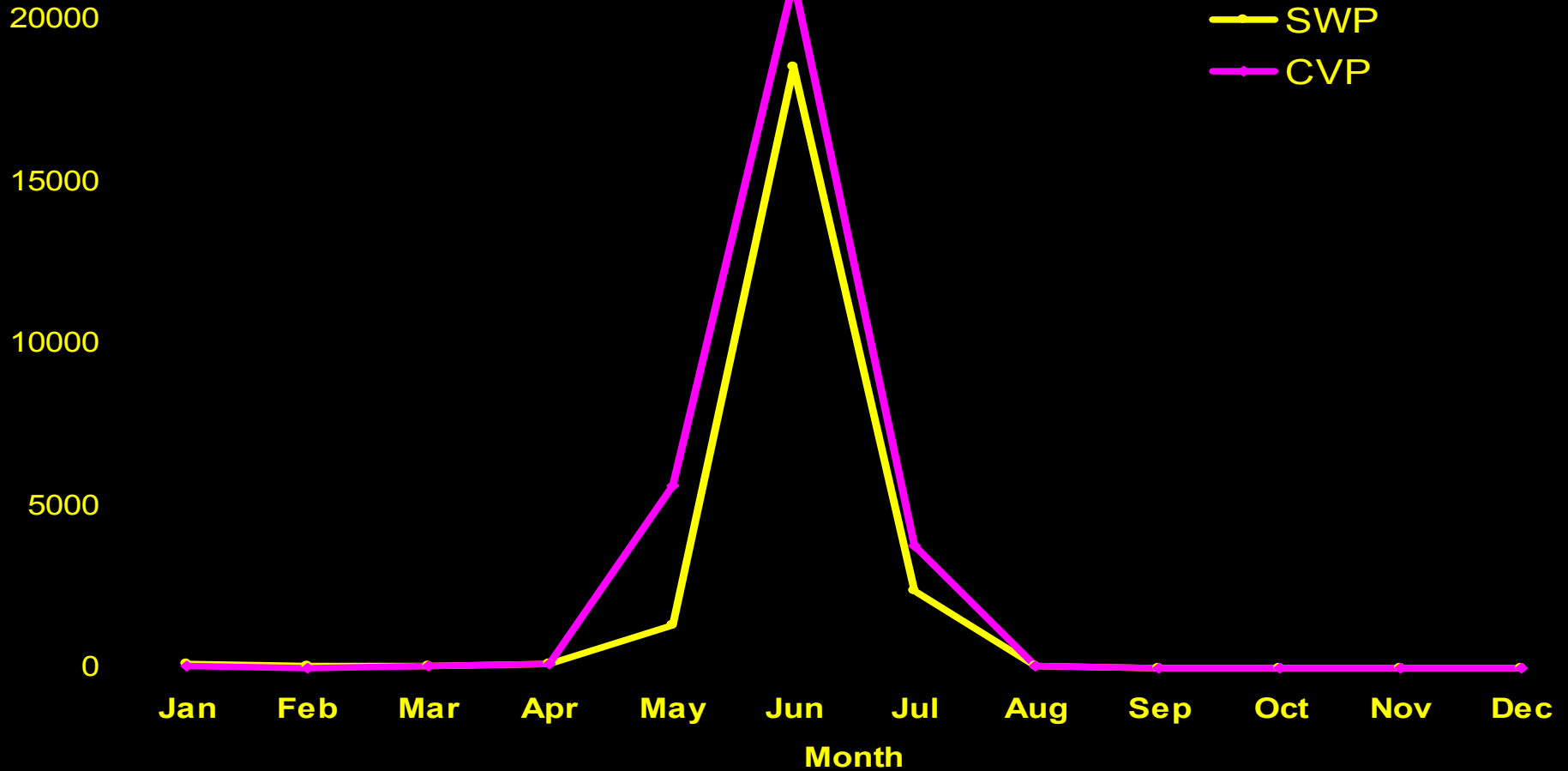
Monthly Longfin Smelt Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)



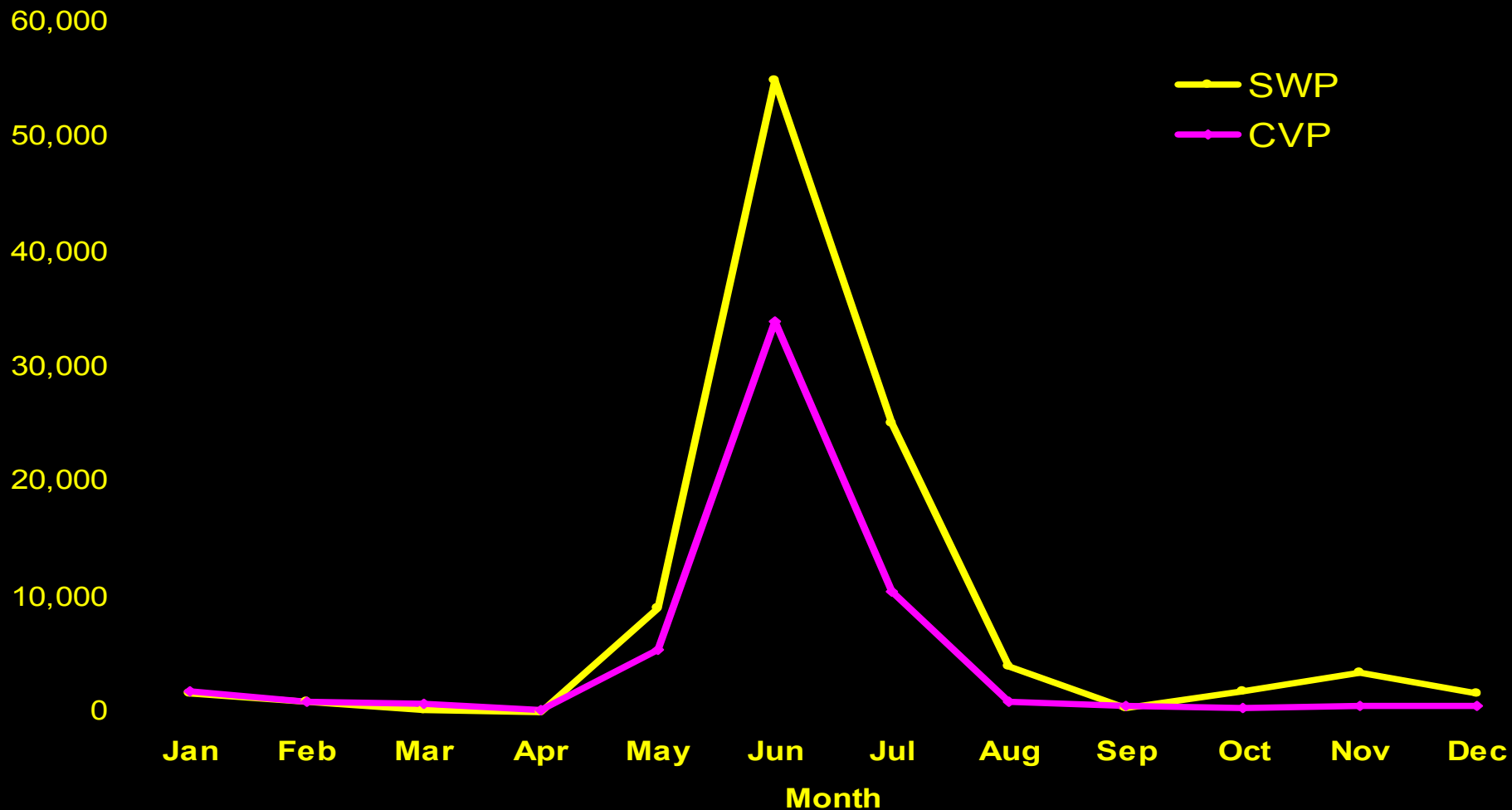
Monthly Splittail Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)

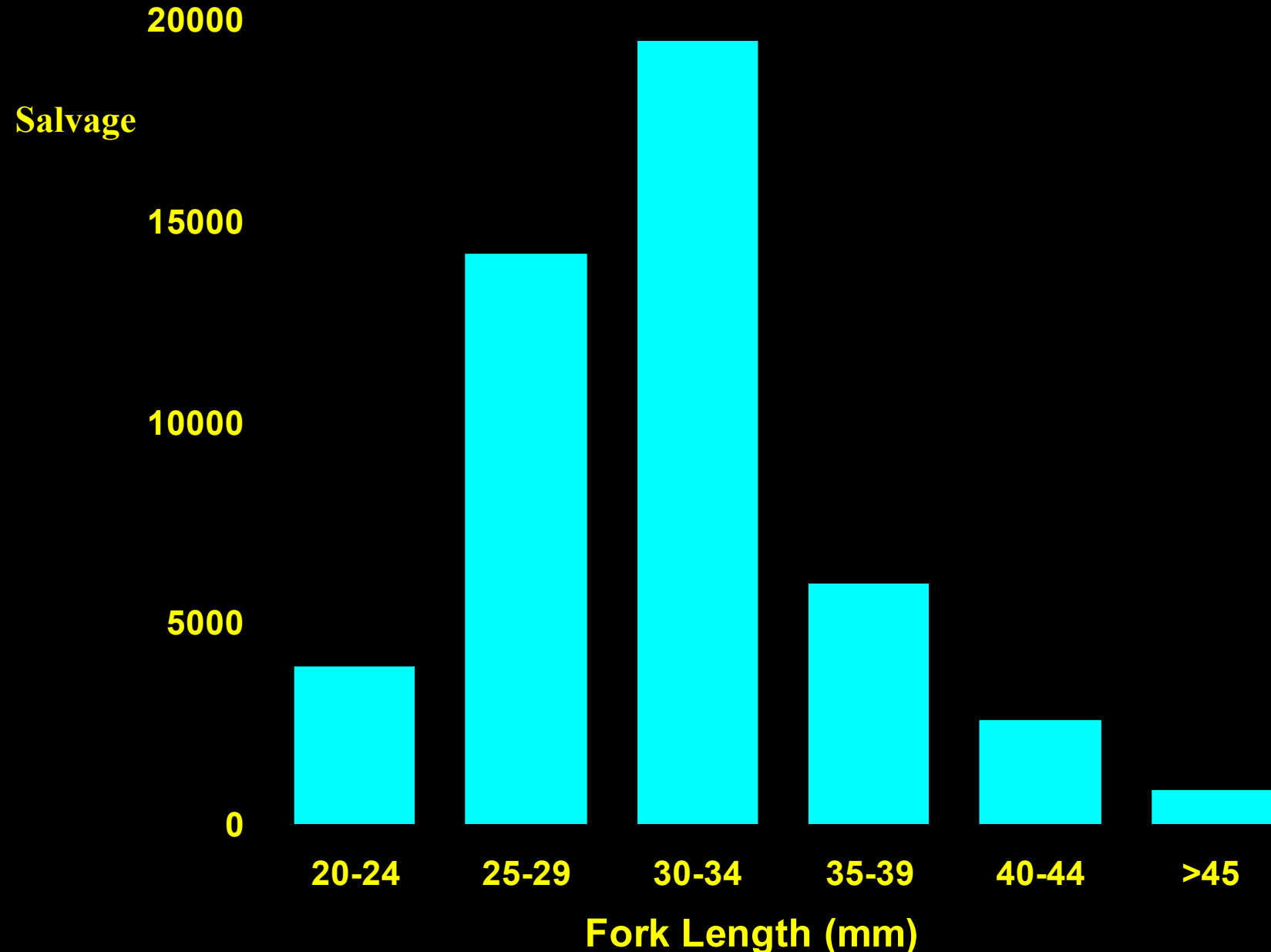


Monthly Striped Bass Salvage Density 1993-2002

Salvage Density
(Fish/ 10,000 AF)



SWP Delta Smelt Salvage Length Frequencies May 1999-2001



END