

# FY98-FY24 USACE Public Recreation Fatalities Data Summary

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### **Executive Summary**

The U.S. Army Corps of Engineers (USACE) National Operations Center for Water Safety, a.k.a. USACE National Water Safety Program, was established in 1994 and has been tracking USACE public recreation fatality statistics and trends since 1998. This data summary includes summary sheets for USACE and their divisions, line graph showing the number of USACE water-related public recreation fatalities back to 1971, causes of death, and fatalities by month, day, and time.

As shown on the line graph on page 2, 162.1 is the annual average of USACE water-related public recreation fatalities since 1987, which is the year after USACE began promoting water safety nationwide through a unified safety education campaign and 158 fatalities is the annual average over the last five years (FY20-24).

The line graph also shows that since 1987 the highest number of USACE water-related public recreation fatalities occurred in 1998, 214 fatalities, and has not exceeded 200 fatalities since then. The lowest number of water-related fatalities since 1987 occurred in 2015, 118 fatalities. This shows that the unified approach of promoting water safety is working, but more needs to be done to bring the number of fatalities even lower including focusing on the target audience and increasing life jacket wear.

The FY98-24 summary sheet on page 3 shows that 89% of the public recreation fatalities were male, 89% were not wearing a life jacket, 82% were 18 or older, 47% were swimming in undesignated areas, 20% were from falls from boats, docks, and shore, and 21% alcohol was involved or suspected. The ten year, FY24, FY23, and division summary sheets show similar statistics. Knowing these statistics makes the target audience at USACE lakes and river projects when it comes to water safety adult males not wearing life jackets, so we must focus on them through education and enforcement.

Page 8 shows that most USACE public recreation fatalities occur in the months of May through August with June and July having the highest number of fatalities, on Saturdays and Sundays, between 1400 and 1800 hours.

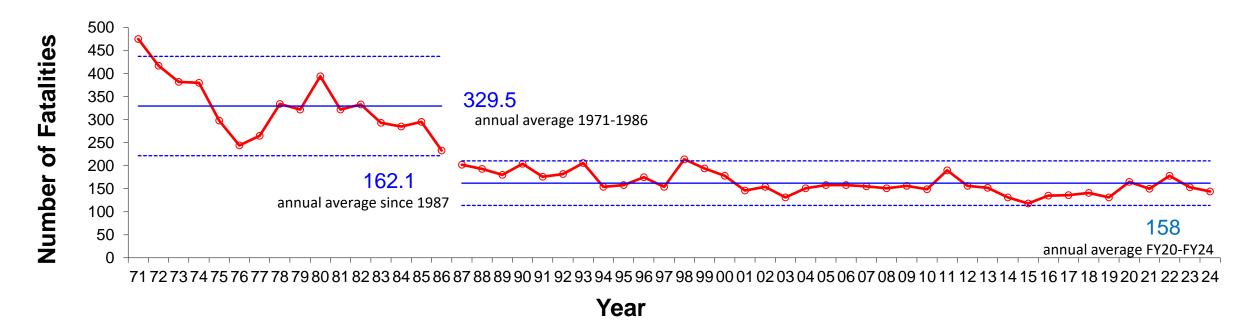
The spreadsheet on page 9 shows the number of public recreation fatalities broken down by USACE divisions and districts from FY98-FY24. In FY23, there were 161 public recreation fatalities and in FY24 there were 150, which is a 7% decrease.

In FY23, the breakdown by division is LRD 33, MVD 8, NAD 2, NWD 17, SAD 29, SPD 5, and SWD 67 and the districts with the most fatalities include SWF 34, SWT 20, LRN 17, SAM 14, and SWL 13.

In FY24, the breakdown by division is LRD 27, MVD 5, NAD 2, NWD 29, SAD 41, SPD 5, and SWD 41 and the districts with the most fatalities include SWF 19, SAM 16, SWT 17, LRN 14, and SAS 14.

If it wasn't for the hard work and dedication of USACE employees across the nation promoting water safety the numbers in this data summary would be higher, so that is something to be thankful for, but there is still work that needs to be done. Remember that the target audience is adult males not wearing life jackets at USACE lakes and river projects, so please do whatever you can to promote water safety to adults and increase life jacket wear.

# **USACE Public Recreation Water-Related Fatalities**



Notes: 1971 - Enactment of the Federal Boat Safety Act, U.S. Coast Guard and the States began working within the forum of National Association of State Boating Law Administrators (NASBLA)

1986 - USACE began promoting water safety nationwide through an annual, unified safety education campaign

1994 - USACE National Operations Center (NOC) for Water Safety was established

1998 - NOC began quantifying water-related public recreation fatalities data

### USACE Public Recreation Fatalities One-Page Summary FY98 - FY24 ## % of **Activity Summary** Number **Total** Swimming Total 1832 43.11% **Designated Area** 341 8.02% **Undesignated Area** 1491 35.08% Total Undesignated Swimming Area 47.1% Total Falls Boat, Dock, Shore, etc. **Boating Total** 1948 45.84% 19.6% Swimming 511 12.02% Collision 187 4.40% **PWC** 103 2.42% 366 8.61% Capsized 12.40% Falls from Boat 527 \*\*\*\*\*Other Boating 5.98% 254 306 Other Falls 7.20% Other Recr Total 164 3.86% 4250 TOTAL 100.0% **Category Summary** Gender \*Wearing PFD 468 YES 235 5.5% Female 11.0% 3762 Male 88.5% NO 3793 89.2% 20 Unknown 0.5% Unknown 101 2.4% 4250 Total \*N/A 2.8% 121 4250 **Common Age Groupings** \*\*Alcohol/Drug ###Outgranted 13 and under 8% 340 % Age14-17 375 YES 718 9% YES 284 26% Age18-35 38% 1613 NO 1893 45% NO 813 74% Age36-53 24% 1026 #SUSP 169 4% 1097 Age 54 & Over 20% 835 Unk 1470 35% 4250 4250 \*\*\* Swimming Fatalities (incl boat&swim) % 10 Yr Age Groupings Designated Area Age 0-9 217 Undesignated Area 2016 86% Age 10-20 21% 885 Age 21-30 21% 893 Total Swimming Only 2350 Age 31-40 15% 652 \*\*\*Cause Age 41-50 13% 562 **D** = **D**rowning 3660 86.1% Age 51-60 T = Trauma 10.0% 11% 464 427 **DH** = **H**ypothermia Age 61-70 7% 307 59 1.4% 5% 209 M = Medical 0.6% 71 & Over 25 \*\*\*HR = Heat Related Age Unknown 1% 61 3 0.1% \*\*\*CO = Carbon Monoxide 4250 24 0.6% **U** = **U**nknown 1.2% 52 4250 100% Not applicable category in PFD section started in FY06

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas

<sup>\*\*</sup>FY06-combined alcohol/drugs together so we could summarize prior data, assumed that if no alcohol reported then no drugs were involved
\*\*\*Started tracking in FY06 - carbon monoxide as new cause and started tracking in FY22 - heat related as a new cause

<sup>\*\*\*\*</sup> All swimming-related drownings (intentionally entering water) including boating & swimming when location is known

<sup>\*\*\*\*\*</sup>BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

### **Public Recreation Fatalities \*FY98-FY24 Total Fatalities** 4,250 \*Fiscal Year is OCT 01-SEP 30 RANGER **Swimming Boating** Total 1,948 Total 1,832 43.11% 45.84% 8.02% 35.08% 12.02% 4.40% T. 1,491 341 511 187 **Undesignated Designated Swimming** Collision 7.20% 3.86% 2.42% 8.61% 103 306 164 366 Other Falls **PWC Other Rec Total** Capsized 12.40% 19.6% 47.1% 5.98% 833 2,002 Total **Total**

**U.S. Army Corps of Engineers** 

# 89% in minimination of the were male in the second of the

527

**Boat Falls** 

254

**Other Boating** 

**Undesignated** 

Swimming

Boat, Dock, Shore, etc.



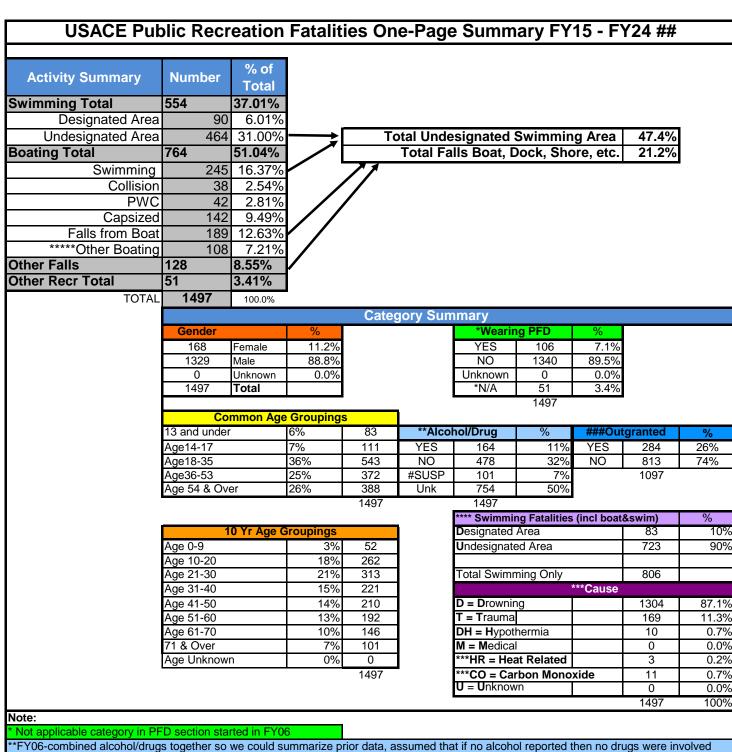
89% Were Not Wearing a Life Jacket



PleaseWearlt.com







<sup>\*\*</sup>FY06-combined alcohol/drugs together so we could summarize prior data, assumed that if no alcohol reported then no drugs were involved \*\*\*Started tracking in FY06 - carbon monoxide as new cause and started tracking in FY22 - heat related as a new cause

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# USACE Public Recreation Fatalities One-Page Summary FY23 Data

Activity Summary	FY23	FY23 % of Total			Fatalitio	s By Division
Swimming Total	65	40.4%			LRD 33	20.50%
Designated Area					MVD 8	4.97%
Undesignated Area				FY23	NAD 2	1.24%
Boating Total	72	44.7%	Total Undesignated Swimming Area	55%	NWD 17	10.56%
Swimming	32	19.9%	<b>→</b>		SAD 29	18.01%
Collision	1	0.6%			SPD 5	3.11%
PWC	5	3.1%			SWD 67	41.61%
Capsized	13	8.1%			Districts w	ith most fatalities
Falls from Boat	15	9.3%		FY23	SWF 34	21.12%
*****Other Boating	6	3.7%	Total Falls Boat, Shore, etc.	20%	SWT 20	12.42%
Other Falls Total	17	10.6%	<b>→</b>		LRN 17	10.56%
Other Recreation	7	4.3%			SAM 14	8.70%
TOTAL	161		· 		SWL 13	8.07%

## **Public Recreation Fatality Data Summary**

Gender	FY23		
Female	11	6.8%	
Male	150	93.2%	
Unknown	0	0.0%	
Total	161		

Wearing PFD	FY23		
YES	7	4.3%	
NO	145	90.1%	
Unknown	0	0.0%	
N/A	9	5.6%	

10 yr Age Grpgs	FY23		
Age 0-9	3.7%	6	
Age 10-20	19.3%	31	
Age 21-30	19.3%	31	
Age 31-40	12.4%	20	
Age 41-50	14.3%	23	
Age 51-60	9.9%	16	
Age 61-70	12.4%	20	
71 & Over	8.7%	14	
Age Unknown	0.0%	0	
Total		161	

Alcohol/Drug	FY23		
YES	21	13.0%	
NO	63	39.1%	
SUSPECTED	3	1.9%	
Unknown	74	46.0%	

Common Age Grps	FY	<b>/23</b>
13 & under	6.8%	4
Age14-17	5.6%	9
Ages 18-35	36.0%	37
Ages 36-53	23.0%	37
Age 54 +	28.6%	46
NI - 4 -		•

****Swimming Fatalities		F123	Outgranted		%
<b>D</b> esignated Area	8	8.2%	YES	38	23.6%
<b>U</b> ndesignated Area	89	91.8%	NO	123	76.4%
Total	97				,

Cause	FY23		
<b>D</b> = <b>D</b> rowning	139	86.3%	
T = Trauma	19	11.8%	
DH = Hypothermia	0	0.0%	
HR=Heat Related	1	0.6%	
CO=Carbon Monoxide	2	1.2%	

\*\*\*\* All swimming-related drownings (intentionally entering water) including boating & swimming when location is known \*\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# USACE Public Recreation Fatalities One-Page Summary FY24 Data

Activity Summary	FY24	FY24 % of Total			Fatalities	s By Division
Swimming Total	61	40.7%			LRD 27	18.00%
Designated Area	11	7.3%			MVD 5	3.33%
Undesignated Area	50	33.3%	1	FY24	NAD 2	1.33%
Boating Total	75	50.0%	Total Undesignated Swimming Area	49%	NWD 29	19.33%
Swimming	24	16.0%			SAD 41	27.33%
Collision	2	1.3%			SPD 5	3.33%
PWC	4	2.7%			SWD 41	27.33%
Capsized	17				Districts wi	th most fatalities
Falls from Boat	22	14.7%	1	FY24	SWF 19	12.67%
*****Other Boating	6	4.0%	Total Falls Boat, Shore, etc.	21%	SWT 17	11.33%
Other Falls Total	9	6.0%	-		SAM 16	10.67%
Other Recreation	5	3.3%			SAS 14	9.33%
TOTAL	150		- D		LRN 14	9.33%

## **Public Recreation Fatality Data Summary**

Gender	FY24		
Female	8	5.3%	
Male	142	94.7%	
Unknown	0	0.0%	
Total	150		

Wearing PFD	FY24		
YES	7	4.7%	
NO	137	91.3%	
Unknown	0	0.0%	
N/A	6	4.0%	

10 yr Age Grpgs	FY	<b>′24</b>
Age 0-9	1.3%	2
Age 10-20	24.0%	36
Age 21-30	17.3%	26
Age 31-40	16.7%	25
Age 41-50	13.3%	20
Age 51-60	14.0%	21
Age 61-70	5.3%	8
71 & Over	8.0%	12
Age Unknown	0.0%	0
Total		150

Alcohol/Drug	FY24		
YES	16	10.7%	
NO	51	34.0%	
SUSPECTED	2	1.3%	
Unknown	81	54.0%	

Common Age Grps	FY24				
13 & under	5.3%	8			
Age14-17	8.0%	12			
Ages 18-35	38.0%	57			
Ages 36-53	26.7%	40			
Age 54 +	22.0%	33			
NL - 4 -					

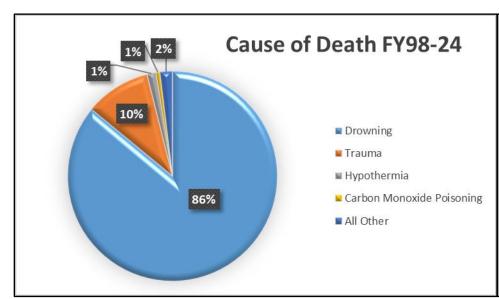
SWIIII	illing ratalities	1 127	Outg	anteu	%
<b>D</b> esignated Area	10	11.8%	YES	45	30.0%
<b>U</b> ndesignated Area	75	88.2%	NO	105	70.0%
Total	85				
		•			

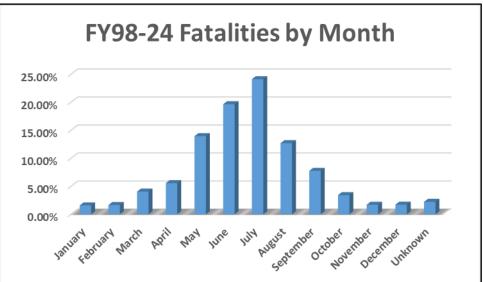
Cause	FY24				
<b>D</b> = <b>D</b> rowning	132	88.0%			
T = Trauma	18	12.0%			
<b>DH = H</b> ypothermia	0	0.0%			
HR=Heat Related	0	0.0%			
CO=Carbon Monoxide	0	0.0%			

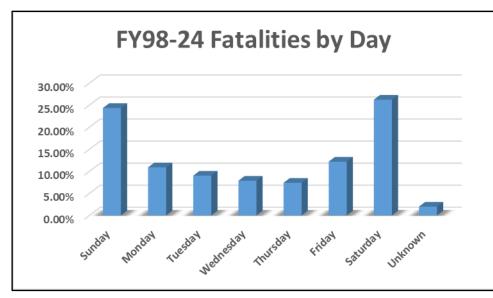
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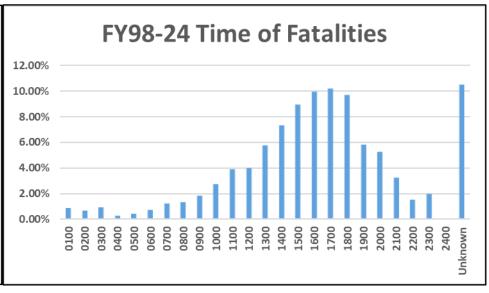
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Corps of Engineers Pul	blic Recreation	Fatali	ties FY	98 - FY	/24																								Ī	
Division	District					2001	2002 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total	Average
2	Buffalo	LRB	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Great Lakes and Onio River	Chicago	LRC	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0
Ohio	Detroit	LRE		0	0	0	0 0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
and	Huntington	LRH		4	3	7	10 2	0	6	7	3	1	5	4	3	5	3	1	8	4	3	6	1	2	4	7	5	2	113	4.2
, akes	Louisville	LRL		6	3	2	3 4	5	10	14	7	8	9	6	4	9	9	7	9	7	6	4	12	13	3	6	9	11	192	7.1
creat	Nashville	LRN	_	17	17	10	11 5	11	13	16		11	14	15	19	10	14	18	14	13	17	17	13	20	15	13	17	14	391	14.5
G,	Pittsburgh	LRP	6	2	2	3	0 0	0	0	0	1	3	4	6	1	5	5	1	2	1	4	3	1	0	3	1	1	0	55	2.0
	TOTAL	LRD	40	29	25	22	24 11	16	30	37	27	23	32	31	27	29	31	27	33	25	30	30	27	35	25	27	33	27	753	27.9
	\/;alaalaaaa	NAV/IZ	40	40	0	0	0 7	-	4	4	4	_	0			4	4	0	4	1		4			_	0	_		407	4.7
	Vicksburg	MVK		10	8	9	2 7	8	4	1	4	5	2	9	2	4	4	0	1	4	0	4	5	3	3	8	5	3	127	4.7
Lalley	Memphis	MVM		0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
iopi	New Orleans St. Paul	MVN MVP		0	0	0	0 0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	•	0	0	0	0	4	0.1
::esissif	Rock Island	MVR	0	5	0	0	1 1	2	2	0 8	5 3	0	0	0 1	0	2	3	0 5	2	2	0	0	0 5	0	0	3	3	0	9	0.3 2.0
VIII	St. Louis	MVS		3	2	3	1 2 5	1	5	3	8	2	2	5	4	3	2	3	3	2	3	3	2	4	5	1	0	1	53 87	3.2
		MVD		18	10		6 15	12	11	12	20	8	4	15	8	10	9	8	6	8	3	8	12	8	8	12	8	5	280	10.4
	. OIAL	1.51 7 12	<u> </u>		10	14	J 13	14	•••		0	<u> </u>	7	10		10	<u> </u>	<u> </u>			<u> </u>		12			12		<u> </u>	200	10.4
	Baltimore	NAB	1	1	0	0	0 0	2	3	1	2	1	0	1	2	4	2	2	2	2	1	0	0	1	2	1	0	2	33	1.2
Jir.	New England			1	0	0	1 1	0	1	2	0	0	0	1	2	0	0	1	0	3	0	0	1	0	0	1	0	0	15	0.6
Atlanti	New York	NAN		0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
North Atlantic	Norfolk	NAO		0	0	0	0 0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
,	Philadelphia	NAP	0	3	1	2	0 0	0	1	0	1	0	1	0	2	0	0	0	0	0	1	0	0	1	0	2	2	0	17	0.6
	TOTAL	NAD	1	5	1	2	1 1	2	5	4	3	1	1	2	6	4	2	3	2	5	2	0	1	2	2	4	2	2	66	2.4
	Kansas City	NWK	6	14	4	2	9 9	8	11	12	5	5	7	11	7	6	16	10	6	5	5	5	1	6	12	6	8	13	209	7.7
Northwestern	Omaha	NWO		8	8	3	5 1	3	2	3	3	4	2	1	4	9	7	3	8	3	6	9	5	4	7	9	6	10	136	5.0
Meste	Portland	NWP		2	4	0	1 5	2	4	3	5	4	5	2	1	2	1	0	4	2	2	3	3	2	3	5	1	4	78	2.9
Morti,	Seattle	NWS		1	0	0	0 0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0.1
· ·	Walla Walla	NWW		2	2	2	1 1	2	5	7	1	2	3	4	2	2	1	1	0	1	1	4	0	1	1	4	2	2	54	2.0
	TOTAL	NWD	17	27	18	7	16 16	15	22	25	14	15	17	18	14	19	25	15	18	11	14	21	9	13	24	24	17	29	480	17.8
Pacific Ocean	Alaska	POA	4	0	1	0	0 0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0.2
citic		1																												
690.	TOTAL	POD	4	0	1	0	0 0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0.2
	Charlaston	240	_		0	0	0 0	-	0	0	0	0	0			0		•	0	0	_	0	0		0			0	_	0.0
	Charleston		0			0						0	-	0	0	1	0	0	0		0	0	0	0	0	0	0	0	0	0.0
, #lantit	Jacksonville Mobile	SAM	0 19	33	3 15	0	0 0 20 16	22	18	0 18	0 24	2 23	5	17	31	21	17	24	4	2		10		0			0	3 16	32	1.2
South Atlantic	Savannah	SAS		12		13 10	9 6	10	3	4	8	8	16 3	10	9	8	5	7	14 7	22 7	21 6	19 8	16 10	26 2	14 10	23 6	14 6	14	532 208	19.7 7.7
900	Wilmington	SAW		4	10	6	8 5	8	1	5	4	9	10	2	5	3	6	4	3	3	7	4	3	8	6	9	9	8	161	6.0
			43				37 27		24	27		42	34	30	47	33	29	36	28	34	34	32	29	36	30	38	29	41	933	34.6
	1 0 17 1	<u> </u>		<del></del>				<del></del>	<u>  </u>				3.		<u> </u>				<u> </u>	<u> </u>				<del> </del>						
	Albuquerque	SPA	2	2	3	4	1 0	4	2	1	0	2	0	0	2	2	1	0	0	1	3	3	0	1	0	0	0	1	35	1.3
agcific	Sacramento	SPK	5	1	2	8	7 5	6	5	2	4	0	4	3	8	3	2	2	1	0	6	4	3	3	2	4	5	1	96	3.6
South Pacific	Los Angeles	SPL	0	0	0	0	0 0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0.1
50°	San Francisco	SPN	5	0	3	1	1 1	1	1	2	1	0	6	0	0	0	1	0	1	0	2	1	2	0	0	0	0	1	30	1.1
	TOTAL	SPD	12	3	8	13	9 6	11	8	6	5	2	10	3	10	5	4	2	2	1	11	8	5	4	2	4	5	5	164	6.1
an	Fort Worth	SWF		30	43	30	26 22		23	23		33	30	27	40	25	24	26	14	25	21	30	25	35	27	41	34	19	747	27.7
, Nester	Galveston	SWG		0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	5	0.2
Southwestern	Little Rock	SWL		15		10	20 14		17	10	13	3	15	7	11	15	19	17	6	16	7	5	7	5	19	16	13	5	329	12.2
9	Tulsa <b>TOTAL</b>	SWT	<b>73</b>	16	28 <b>80</b>	21 <b>61</b>	15 19 <b>61 55</b>		18 <b>58</b>	14 <b>47</b>		24 <b>60</b>	13 <b>58</b>	16 <b>50</b>	34 <b>85</b>	17 <b>57</b>	19 <b>62</b>	7 <b>51</b>	12 <b>32</b>	14 <b>55</b>	18 <b>46</b>	14 <b>49</b>	12 <b>48</b>	30 <b>70</b>	18 <b>64</b>	18 <b>75</b>	20 <b>67</b>	17 <b>41</b>	487 1568	18.0 58.1
	IOIAL	3440	13	01	00	υı	01 33	JJ	30	71	43	00	30	JU	03	31	02	J1	32	<u> </u>	40	43	40	10	04	13	07	41	1300	30.1
netionwide	TOTAL	COE	214	194	178	146	154 131	151	158	158	155	151	156	149	197	157	162	142	121	139	140	148	131	168	155	184	161	150	4250	157.4
Nation.		† <u> </u>					2002 2003										2013					2018			2021		2023			Average
	Change			-9%		-18%								-4%																
				Note:	Started	record	ing all public	recrea	tion fatal	ities in	FY11, p	orior to	that or	nly wate	er-related	1														

LRD Public	Recreation	n Fatalitie	s One-Page Summa	ry FY98 - F <b>`</b>	<b>/24</b> #	#
Activity Summary (Based on Codes)	Number	% of Total				
Swimming Total	281	37.32%				
Designated Area	54	7.17%				
Undesignated Area	227	30.15%	$\rightarrow$			
<b>Boating Total</b>	388	51.53%	Total Undesignated	Swimming Are	a	4
Swimming	93	12.35%	Total Falls Boat, Sh	ore, etc.		2
Collision	50	6.64%	17			
PWC	21	2.79%				
Capsized	55	7.30%	//			
Falls from Boat	116	15.41%				
*****Other Boating	53	7.04%				
Other Falls Total	60	7.97%				
Other Recreation	24	3.19%	###(	Outgranted	%	
TOTAL	753		YES	45	22%	
			NO	159	78%	

Total Undesignated Swimming Area	42.50%
Total Falls Boat, Shore, etc.	23.37%

	%	
YES	45	22%
NO	159	78%
	204	_

### LRD Recreation Fatality Data Summary FY98 Gender 84 11.2% Female 668 88.7% Male Unknown 1 0.1% 753 Total

10 yr Age Groupings							
Age 0-9	4%	33					
Age 10-20	21%	155					
Age 21-30	19%	141					
Age 31-40	16%	120					
Age 41-50	15%	113					
Age 51-60	12%	88					
Age 61-70	7%	56					
71 & Over	5%	34					
Age Unknown	2%	13					
Total		753					

Other Common Age Groupings						
13 & under	7%	49				
Age14-17	7%	49				
Ages 18-35	39%	292				
Ages 36-53	26%	197				
Age 54 & Over	20%	153				
Age Unknown	2%	13				
-		753				

Weari	ng PFD	%							
YES	48	6.4%							
NO	676	89.8%							
Unknown	13	1.7%							
*N/A	16	2.1%							
	753								

**Alcohol/Drug		%
YES	134	17.8%
NO	269	35.7%
#Suspected	34	4.5%
Unknown	316	
<del>-</del>	753	

Swimming			%
Designated Area		53	14.1%
<b>U</b> ndesignated Area		324	85.9%
Total		377	

Ca	use		
<b>D</b> = <b>D</b> rowning		652	86.6%
T = Trauma		77	10.2%
DH = Hypothermia		5	0.7%
M = Medical		4	0.5%
***CO = Carbon Monoxide		4	0.5%
***HR = Heat Related		0	0.0%
<b>U</b> = <b>U</b> nknown		11	1.5%

### Note:

\* Not applicable category in PFD section started in FY06

\*\*FY06-combined alcohol/drugs together so we could summarize previous data, assumed that if no alcohol reported then no drugs were involved

\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 -heat related as new cause

\*\*\*\* All swimming-related drownings including swimming around boats when location is known

\*\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas.

753

# MVD Public Recreation Fatalities One-Page Summary FY98 - FY24 ##

Number		% of Total
100		35.71%
	39	13.93%
	61	21.79%
142		50.71%
	41	14.64%
	22	7.86%
	4	1.43%
	20	7.14%
	41	14.64%
	14	5.00%
23		8.21%
15		5.36%
	142	100 39 61 142 41 22 4 20 41 14

Total Undesignated Swimming Area 36.43%
Total Falls Boat, Shore, etc. 22.86%

###Out	granted	%
YES	6	10%
NO	55	90%

TOTAL 280

# MVD Recreation Fatality Data Summary FY98 - FY24 Gender \*Wearing PFD %

Gende	%	
Female	34	12.1%
Male	246	87.9%
Unknown	0	0.0%
Total	280	

*Weari	ng PFD	%
YES	19	6.8%
NO	248	88.6%
Unknown	6	2.1%
*N/A	7	2.5%
	280	

10 yr Age Groupings			
Age 0-9	6%	16	
Age 10-20	19%	53	
Age 21-30	19%	52	
Age 31-40	16%	45	
Age 41-50	14%	38	
Age 51-60	12%	33	
Age 61-70	8%	22	
71 & Over	6%	16	
Age Unknown	2%	5	
Total		280	

**Alcohol/Drug		%
YES	50	18%
NO	131	47%
Suspected	10	4%
Unk	89	32%

\*\*\*Swimming Fatalities (includes boat/swim)

Other Common Age Groupings			
13 & under	10%	29	
Age14-17	8%	22	
Ages 18-35	34%	96	
Ages 36-53	23%	63	
Age 54 & Over	23%	65	

Total			141	
		Cause		
$\mathbf{D} = \mathbf{D}$ rown	0		243	86.8%
T = Traum	а		26	9.3%
DH = Hypo			7	2.5%
M = Medic	al		1	0.4%
***CO = Ca	arbon Mon	oxide	3	1.1%
	eat Related	l	0	0.0%
$\mathbf{U} = \mathbf{U} \mathbf{n} \mathbf{k} \mathbf{n} \mathbf{o}$	wn		0	0.0%

38

103

280

28%

76%

Designated Area

Undesignated Area

Note:

\* Not applicable category in PFD started section in FY06

280

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outrgranted areas.

<sup>\*\*</sup>FY06-combined alcohol/drugs together so we could summarize with previous data, assumed that if no alcohol reported then no drugs were involved

<sup>\*\*\*</sup>Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

<sup>\*\*\*\*</sup> All swimming-related drownings including swimming around boats when location is known

<sup>\*\*\*\*\*</sup>BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

<sup>#</sup> Started tracking "Suspected" Alcohol in 2010

# NAD Public Recreation Fatalities One-Page Summary FY98 - FY24 ##

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	34	51.52%
Designated Area	3	4.55%
Undesignated Area	31	46.97%
Boating Total	24	36.36%
Swimming	5	7.58%
Collision	5	7.58%
PWC	C	0.00%
Capsized	7	10.61%
Falls from Boat	2	2 3.03%
*****Other Boating	5	7.58%
Other Falls Total	2	3.03%
Recr-not water	6	9.09%

Total Undesignated Swimming Area 54.55% Total Falls Boat, Shore, etc. 6.06%

TOTAL 66

###Outgranted		%
YES	3	23%
NO	10	77%
	13	

NAD Recreation Fatality Data Summary FY98 - FY24							
Gend	er	%		Wearing	PFD	%	
Female	8	12.1%		YES	2	3.0%	
Male	58	87.9%		NO	54	81.8%	
Unknown	0	0.0%		Unknown	4	6.1%	
Total	66			*N/A	6	9.1%	

Gende	er	%	Wearing	PFD	%
male	8	12.1%	YES	2	3.0%
ale	58	87.9%	NO	54	81.8%
known	0	0.0%	Unknown	4	6.1%
tal	66		*N/A	6	9.1%
				66	

10 yr Age Groupings				
Age 0-9	3%	2		
Age 10-20	27%	18		
Age 21-30	18%	12		
Age 31-40	9%	6		
Age 41-50	9%	6		
Age 51-60	17%	11		
Age 61-70	3%	2		
71 & Over	9%	6		
Age Unknown	5%	3		
Total	100%	66		

	Alcono	/Diug	/0	
	YES	4	6%	
	NO	31	47%	
#	SUSPECTED	2	3%	
	Unknown	29	44%	
	****Swimn	ning Fatal	ities(incl bo	at, swim)
	Designated Area			3

Undesignated Area

Total Swimming

\*\*Alcohol/Drug

Other Common Age Groupings			
13 & under	6%	4	
Age14-17	18%	12	
Ages 18-35	29%	19	
Ages 36-53	17%	11	
Age 54 +	26%	17	
		66	

	Cause						
<b>D</b> = <b>D</b> rowning		50	75.8%				
T = Trauma		9	13.6%				
<b>DH = H</b> ypothermia		2	3.0%				
M = Medical		3	4.5%				
***CO = Carbon M		1	1.5%				
***HR = Heat Relat	ted	0	0%				
<b>U</b> = <b>U</b> nknown		1	1.5%				

%

8%

92%

100%

36

39

Note:

Not applicable category in PFD section started in FY06

\*\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

\*\*\*\* Includes all swimming-related drownings even around boats when location is known

\*\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas.

<sup>\*\*</sup>FY06-combined alcohol/drugs together so we could summarize with previous data, assumed that if no alcohol reported then no drugs were involved

# NWD Public Recreation Fatalities One-Page Summary FY98 - FY24 ##

Activity Summary (Based on Codes)	Number		% of Total	
Swimming Total	169		35%	
Designated Area		28	6%	
Undesignated Area		141	29%	•
Boating Total	236		49%	
Swimming		65	14%	
Collision		17	4%	
PWC		12	3%	
Capsized		62	13%	l
Falls from Boat		55	12%	/
*****Other Boating		25	5%	1
Other Falls	34		7%	/
Other Recreation	39		8%	

Total Undesignated Swimming Area 43% Total Falls Boat, Shore, etc. 19%

###Outgranted		%
YES	49	36%
NO	88	64%

137

478

### NWD Water-Related Fatality Data Summary FY98 - FY24

Gender	%	
Female	49	10%
Male	426	89%
Unknown	3	1%
Total	478	

Wearing	g PFD	%
YES	25	5%
NO	410	86%
Unknown	22	5%
*N/A	21	4%
	478	

10 yr Age Groupings				
Age 0-9	5%	25		
Age 10-20	17%	82		
Age 21-30	19%	92		
Age 31-40	15%	73		
Age 41-50	13%	64		
Age 51-60	11%	54		
Age 61-70	8%	37		
71 & Over	9%	43		
Age Unknown	2%	8		
Total		478		

**Alcohol/Drug		%
YES	89	19%
NO	191	40%
#Suspected	21	4%
Unk	177	37%
	478	

Other Common Age			
13 & under	6%	31	
Age14-17	9%	42	
Ages 18-35	33%	159	
Ages 36-53	25%	121	
Age 54 & Over	24%	117	

Swimming Fatalities (include boat/swim) %			
Designated Area 29 12			12%
<b>U</b> ndesignated Area		206	88%
Total		235	

Cause					
$\mathbf{D} = \mathbf{D}$ rowning	)		393	82.2%	
T = Trauma			51	10.7%	
<b>DH</b> = <b>H</b> ypoth	ermia		13	2.7%	
M = Medical			2	0.4%	
***CO = Cark		ide	7	1.5%	
*** HR = Hea	t Related		0	0%	
$\mathbf{U} = \mathbf{U}$ nknowr	)		12	2.5%	
			470	4000/	

478 100%

Not applicable category started in PFD section in FY06

\*\*FY06-combined alcohol/drugs together so we could summarize previous data, assumed that if no alcohol reported then no drugs were involved

\*\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

\*\*\*\* All swimming-related drownings including boating & swimming when location is known

\*\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas

# SAD Public Recreation Fatalities One-Page Summary FY98 - FY24 ##

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	432	46.45%
Designated Area	77	8.28%
Undesignated Area	355	38.17%
Boating Total	396	42.58%
Swimming	95	10.22%
Collision	32	3.44%
PWC	21	2.26%
Capsized	61	6.56%
Falls from Boat	119	12.80%
*****Other Boating	68	7.31%
Other Falls Total	82	8.82%
Other Recreation	20	2.15%

**TOTAL** 

Total Undesignated Swimming Area 48.39% Total Falls Boat, Shore, etc. 21.61%

###Outgranted		%
YES	61	26%
NO	171	74%
	232	

	SAD Re	creatio
Gend	der	%
Female	92	9.9%
Male	833	89.6%
Unknown	5	0.5%
Total	930	

930

10 yr Age Groupings			
Age 0-9	5%	44	
Age 10-20	21%	197	
Age 21-30	22%	208	
Age 31-40	14%	127	
Age 41-50	13%	119	
Age 51-60	11%	106	
Age 61-70	8%	78	
71 & Over	4%	39	
Age Unknown	1%	12	
Total		930	

Other Common Age Groupings			
13 & under	8%	74	
Age14-17	9%	87	
Ages 18-35	38%	354	
Ages 36-53	24%	220	
Age 54 & Over	20%	183	

n Fa	n Fatality Data Summary FY98 - FY24			
	Wearing PFD		%	
	YES	35	3.8%	
	NO	867	93.2%	
	Unknown	14	1.5%	
	*N/A	14	1.5%	
		930		

**Alcohol/Drug		%
YES	140	15.1%
NO	461	49.6%
#Suspected	40	4.3%
Unknown	289	31.1%
	000	

"""""Swimming Fatalities (Incl boat & Swim)		
Designated Area	75	14.3%
<b>U</b> ndesignated Area	451	85.7%
Total Swimming	526	

Cause		
<b>D</b> = <b>D</b> rowning	817	88%
T = Trauma	90	10%
DH = Hypothermia	2	0%
M = Medical	5	1%
***CO = Carbon Monoxide	6	1%
***HR = Heat Related	0	0%
<b>U</b> = <b>U</b> nknown	10	1%

Note:

\* Not applicable category in PFD section started in FY06

\*\*FY06-combined alcohol/drugs together so we could summarize with previous data, assumed that if no alcohol reported then no drugs were involved

\*\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

\*\*\*\* Includes swimming-related drownings even boat/swim when location is known

\*\*\*\*\*BAC, BAE, BAM, BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas.

930

# SPD Public Recreation Fatalities One-Page Summary FY98 - FY24 ##

Number		% of Total	
79		48.17%	
	4	2.44%	
7	5	45.73%	ŀ
63		38.41%	
1	8	10.98%	ŀ
	4	2.44%	
	5	3.05%	
1	2	7.32%	
1	6	9.76%	1
	8	4.88%	
16		9.76%	1
6		3.66%	
	79 763 1 1 1	79 4 75 63 18 4 5 12 16 8	Number     Total       79     48.17%       4     2.44%       75     45.73%       63     38.41%       18     10.98%       4     2.44%       5     3.05%       12     7.32%       16     9.76%       8     4.88%       16     9.76%

TOTAL

Total Undesignated Swimming Area 56.71%
Total Falls Boat, Shore, etc. 19.51%

###Outgranted		%
YES	2	6%
NO	31	94%
	33	

# SPD Recreation Fatality Data Summary Gender % Female 25 15.2% Male 137 83.5% Unknown 2 1.2% Total 164 \*N/A

164

10 yr Age Groupings		
Age 0-9	8%	13
Age 10-20	24%	39
Age 21-30	19%	31
Age 31-40	15%	24
Age 41-50	15%	25
Age 51-60	7%	11
Age 61-70	4%	7
71 & Over	4%	7
Age Unknown	4%	7
Total		164

Other Common Age Groupings		
13 & under	12%	19
Age14-17	9%	14
Ages 18-35	40%	65
Ages 36-53	24%	39
Age 54 & Over	12%	20
		164

*Wearin	g PFD	%
YES	10	6.1%
NO	143	87.2%
Unknown	7	4.3%
*N/A	4	2.4%
	164	

**Alcohol/Drug		%
YES	22	13%
NO	87	53%
#Suspected	5	3%
Unk	50	30%
**** Swimming Fatalities (incl hoat sy		

Designated Area
Undesignated Area

Total			98	
		Cause		
$\mathbf{D} = \mathbf{D}$ rownin	g		140	85.4%
T = Trauma			18	11.0%
<b>DH</b> = <b>H</b> ypoth	nermia		2	1.2%
M = Medical			1	0.6%
***CO = Car		kide	0	0.0%
***HR = Hea			0	0%
$\mathbf{U} = \mathbf{U} \mathbf{n} \mathbf{k} \mathbf{n} \mathbf{o} \mathbf{w}$	n		3	1.8%

164

%

98%

### Note:

\* Not Applicable category in PFD section started in FY06

\*\*FY06-combined alcohol/drugs together so we could summarize with previous data, assumed that if no alcohol reported then no drugs were involved

\*\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

\*\*\*\* All swimming-related drownings including boat & swim when location is known

\*\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started including all public recreation-related fatalities in FY11

### In FY18, started showing how many of the fatalities occurred in Outgranted areas.

# SWD Public Recreation Fatalities One-Page Summary FY98-FY24 ##

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	724	46.17%
Designated Area	135	8.61%
Undesignated Area	589	37.56%
<b>Boating Total</b>	690	44.01%
Swimming	198	12.63%
Collision	58	3.70%
PWC	40	2.55%
Capsized	144	9.18%
Falls from Boat		11.03%
*****Other Boating	77	4.91%
Other Falls Total	87	5.55%
Other Recreation	67	4.27%

TOTAL

Total Undesignated Swimming Area 50.19% Total Falls Boat, Shore, etc. 16.58%

###Outgranted		%
YES	115	28%
NO	299	72%
414		

70	###Outgranted		/0
	YES	115	28%
	NO	299	72%
		414	

SWD Recreation I		
Gender		%
Female	173	11%
Male	1387	88%
Unknown	8	1%
Total	1568	

1568

	Wearing	%		
	YES	99	6%	
	NO	1384	88%	
	Unknown	34	2%	
	*N/A	51	3%	
		1568		

atality Data Summary FY98 - FY24

10 yr Age Groupings			
Age 0-9	5%	82	
Age 10-20	22%	339	
Age 21-30	23%	354	
Age 31-40	16%	255	
Age 41-50	13%	197	
Age 51-60	10%	159	
Age 61-70	7%	105	
71 & Over	4%	64	
Age Unknown	1%	13	
Total		1568	

	**Alcohol/Drug		%	
	YES	277	18%	
	NO	717	46%	
#	Suspected	57	4%	
	Unk	517	33%	
•		1568		

Other Common Age Groupings			
13 & under	8%	130	
Age14-17	10%	149	
Ages 18-35	40%	625	
Ages 36-53	24%	374	
Age 54 & Over	18%	277	
		1568	

**** Swimming Fatalities (incl boat, swim)			%
Designated Area		132	14%
<b>U</b> ndesignated Area		789	86%
			·
Total Swimming		921	·

	Cause			
<b>D</b> = <b>D</b> rowning	J		1354	86.4%
T = Trauma			158	10.1%
DH = Hypothermia		28	1.8%	
M = Medical	·	·	7	0.4%
***CO = Carbon Monoxide		4	0.9%	
***HR = Heat Related			3	0.2%
<b>U</b> = <b>U</b> nknown		·	14	0.9%

Not applicable category started in PFD section in FY06

\*\*FY06-combined alcohol/drugs together so we could summarize with previous data, assumed that if no alcohol reported then no drugs were involved

\*\*Started tracking in FY06 - carbon monoxide as new cause and in FY22 - heat related as a new cause

\*\*\*\* All swimming-related drownings including boating & swimming when location is known

\*\*\*\*BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

# Started tracking "Suspected" Alcohol in 2010

## Started counting all public recreation-related fatalities in FY11

## In FY18, started showing how many of the fatalities occurred in Outgranted areas.

1568

### **Acronyms List**

USACE: U.S. Army Corps of Engineers

FY: Fiscal Year (October 1 – September 30)

LRD: Great Lakes and Ohio River Division

LRH: Huntington District

LRL: Louisville District

LRN: Nashville District

LRP: Pittsburgh District

MVD: Mississippi Valley Division

MVK: Vicksburg District

MVR: Rock Island District

MVS: St. Louis District

NAD: North Atlantic Division

NAE: New England District

NWD: Northwestern Division

**NWK: Kansas City District** 

**NWO: Omaha District** 

**NWP: Portland District** 

SAD: South Atlantic Division

SAM: Mobile District

SAS: Savannah District

SAW: Wilmington District

SPD: South Pacific Division

**SPK: Sacramento District** 

SPN: San Francisco District

SWD: Southwestern Division

SWF: Fort Worth District

SWG: Galveston District

SWL: Little Rock District

SWT: Tulsa District

Link to USACE Division and District Map: <a href="https://www.usace.army.mil/locations.aspx">www.usace.army.mil/locations.aspx</a>