

Estero Bay Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 26 June, 2024

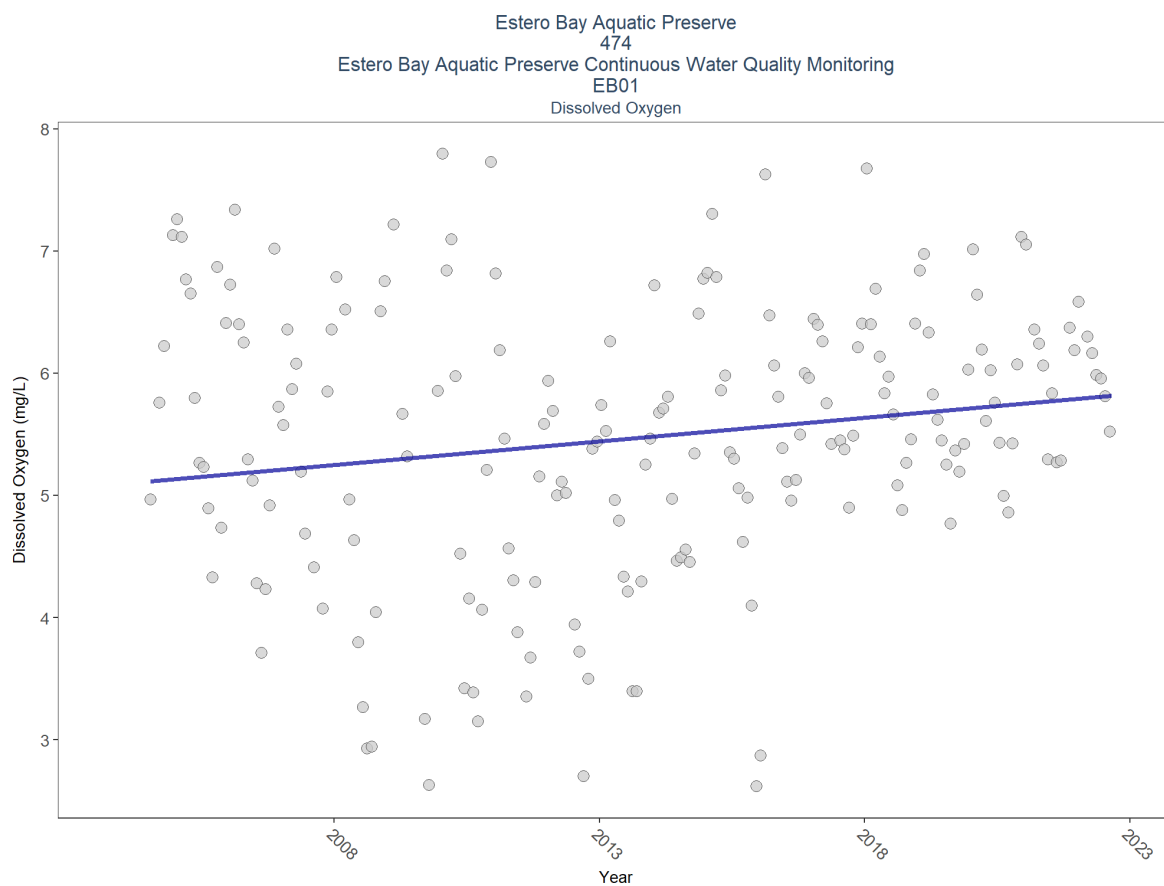
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Parameters

Dissolved Oxygen

EB01

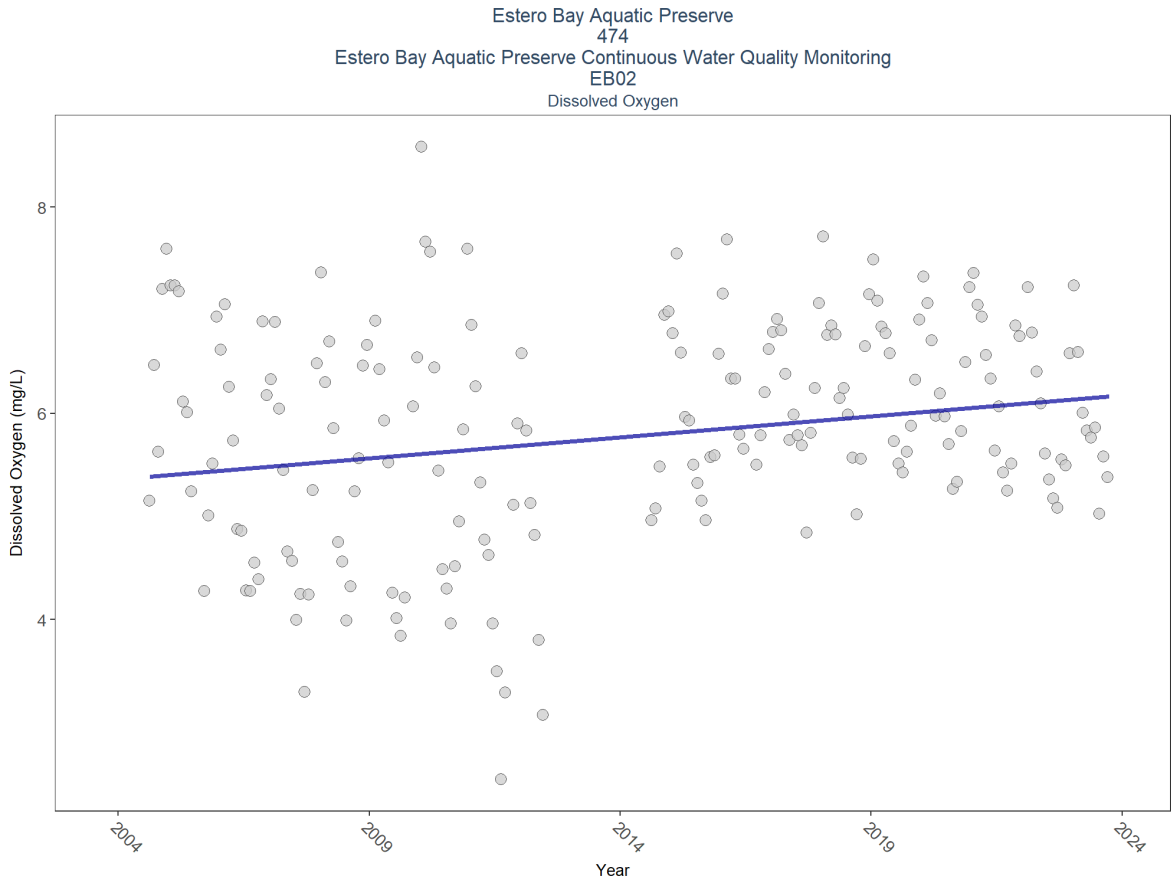


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	478415	19	5.6	TRUE	0.2196	0.0000	0.03869549	5.095745	20.9159	0.0343	1

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

EB02

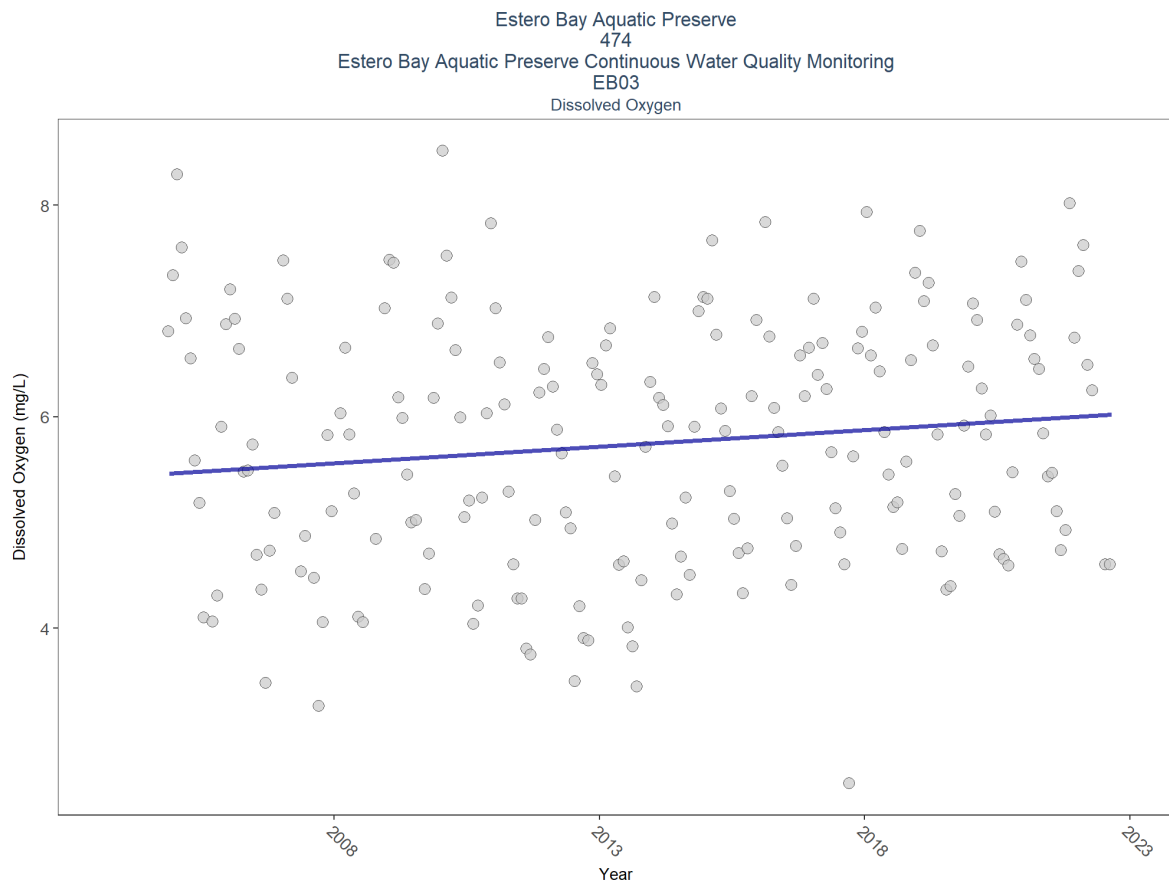


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	445908	19	6	TRUE	0.2514	0.0000	0.04084296	5.358373	7.6363	0.7455	1

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	439701	19	5.9	TRUE	0.1991	0.0002	0.03138447	5.435208	11.2299	0.4242	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

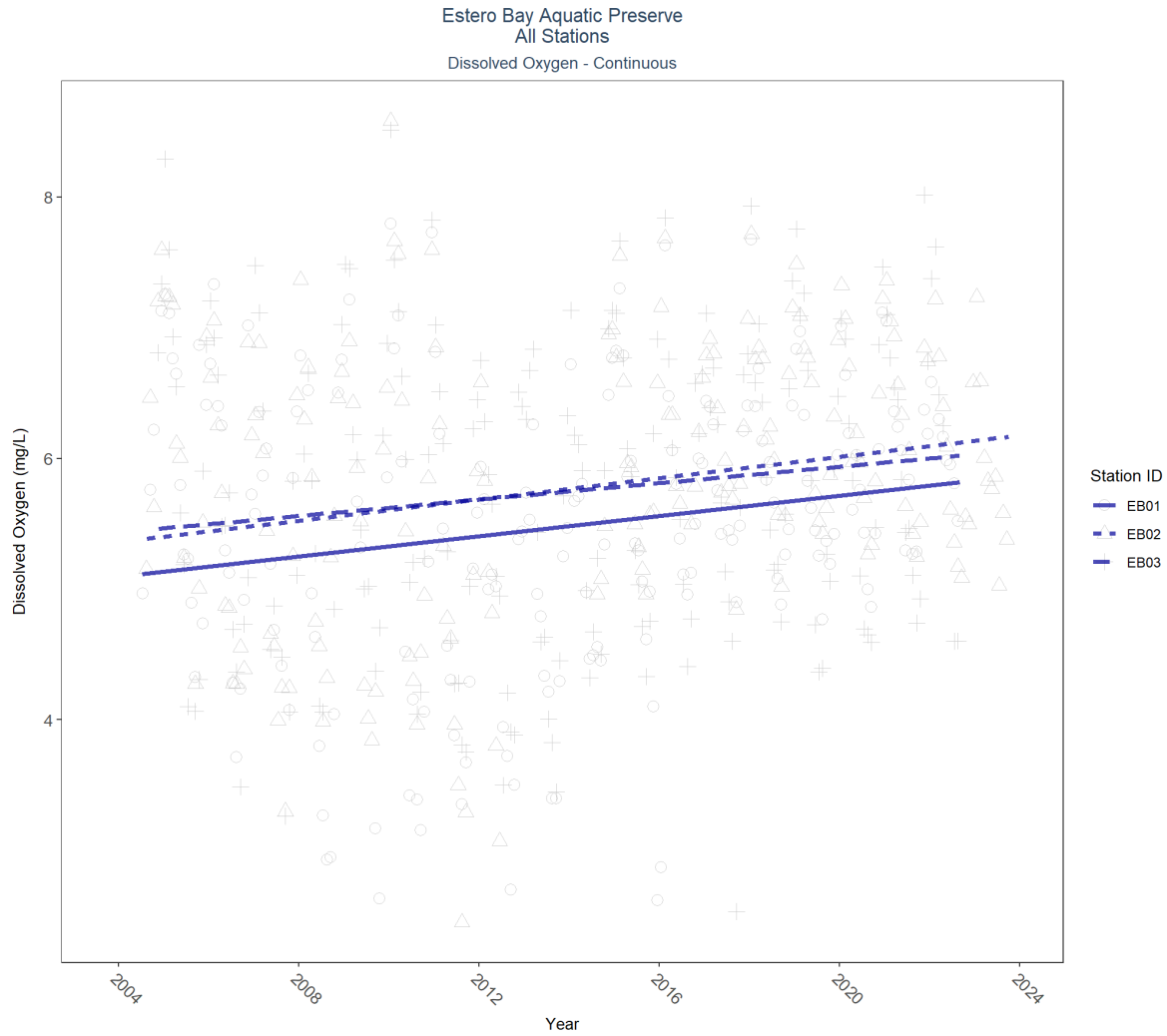
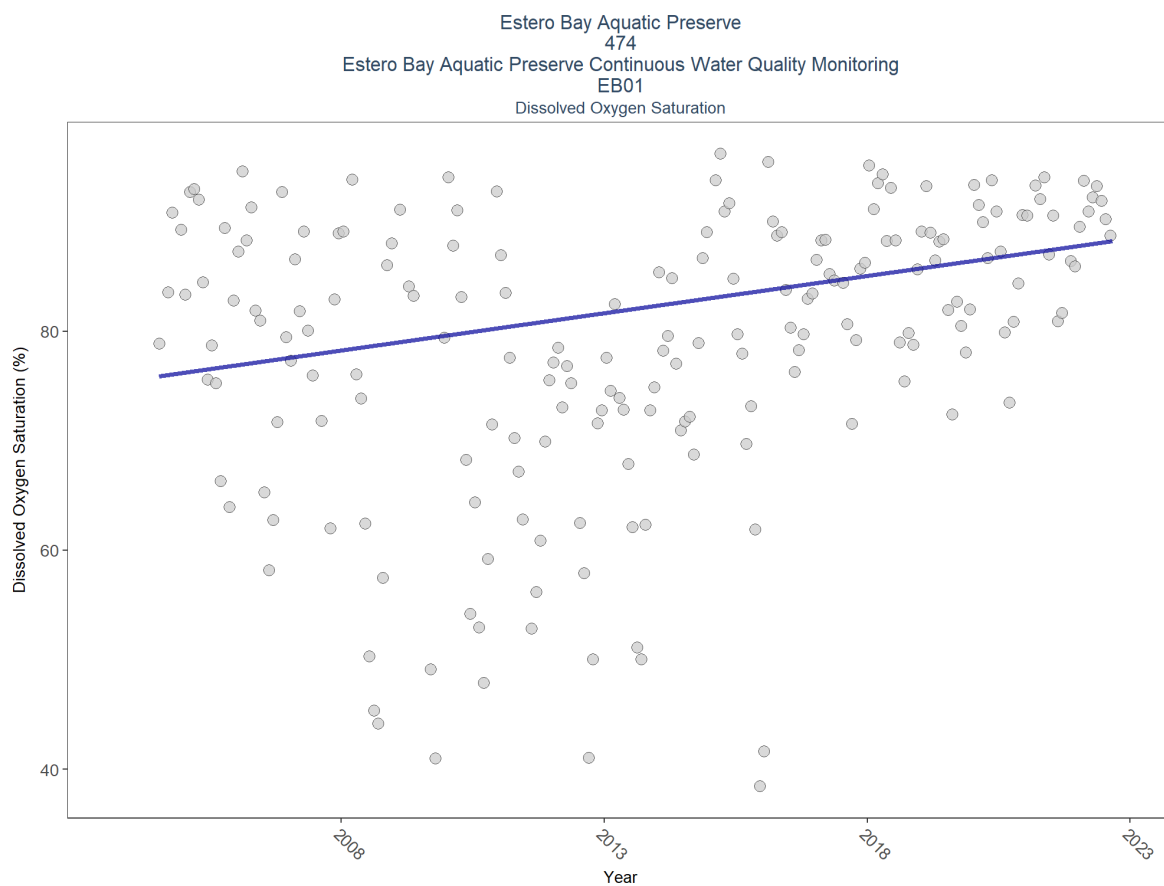


Table 1: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	478415	19	2004 - 2022	5.6	0.22	5.1	0.04	0.0000
EB02	445908	19	2004 - 2023	6.0	0.25	5.36	0.04	0.0000
EB03	439701	19	2004 - 2022	5.9	0.2	5.44	0.03	0.0002
EB04	65961	3	2021 - 2023	5.5	-	-	-	-

Dissolved Oxygen Saturation

EB01

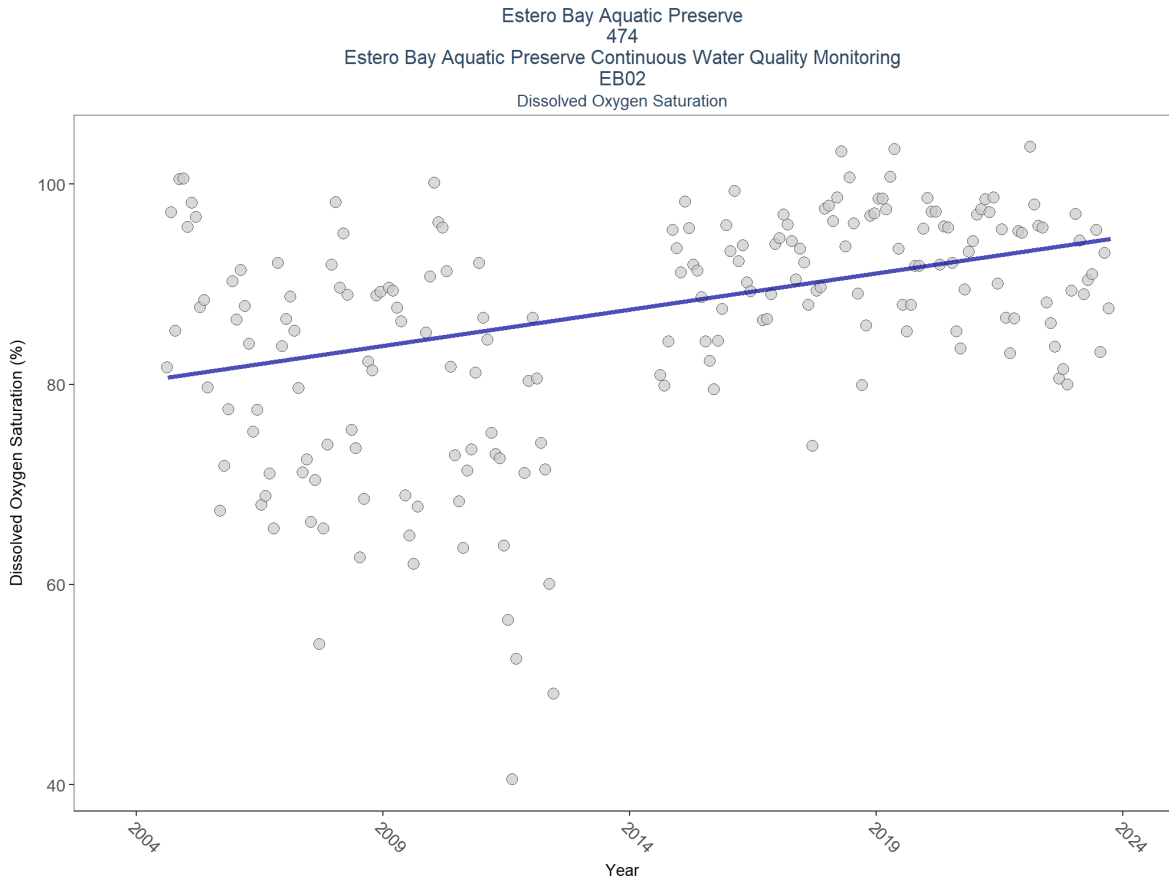


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	480233	19	81.6	TRUE	0.3057	0.0000	0.6815911	75.49737	13.4272	0.2663	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB02

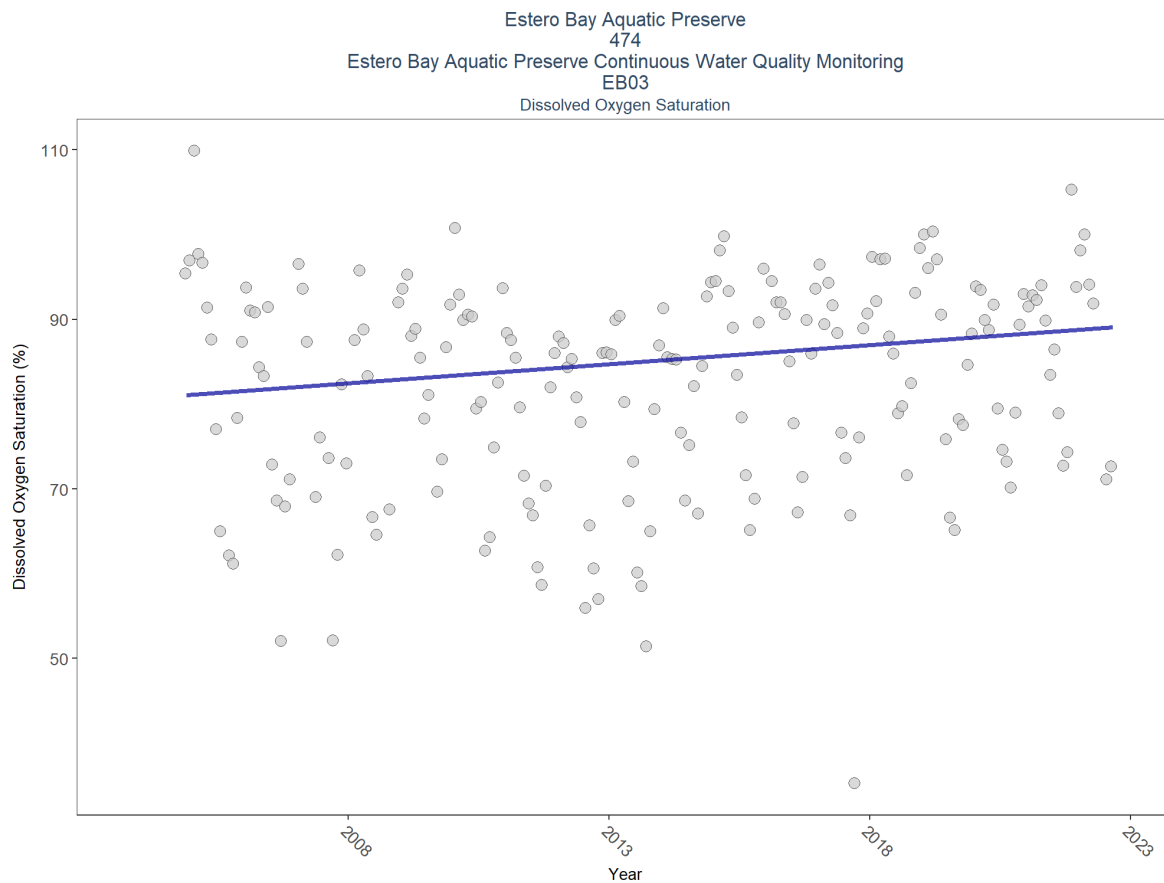


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	446145	19	87.6	TRUE	0.3811	0.0000	0.7242663	80.20564	3.5201	0.9819	1

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	441227	19	83.7	TRUE	0.2531	0.0000	0.4503603	80.68982	6.4615	0.8409	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

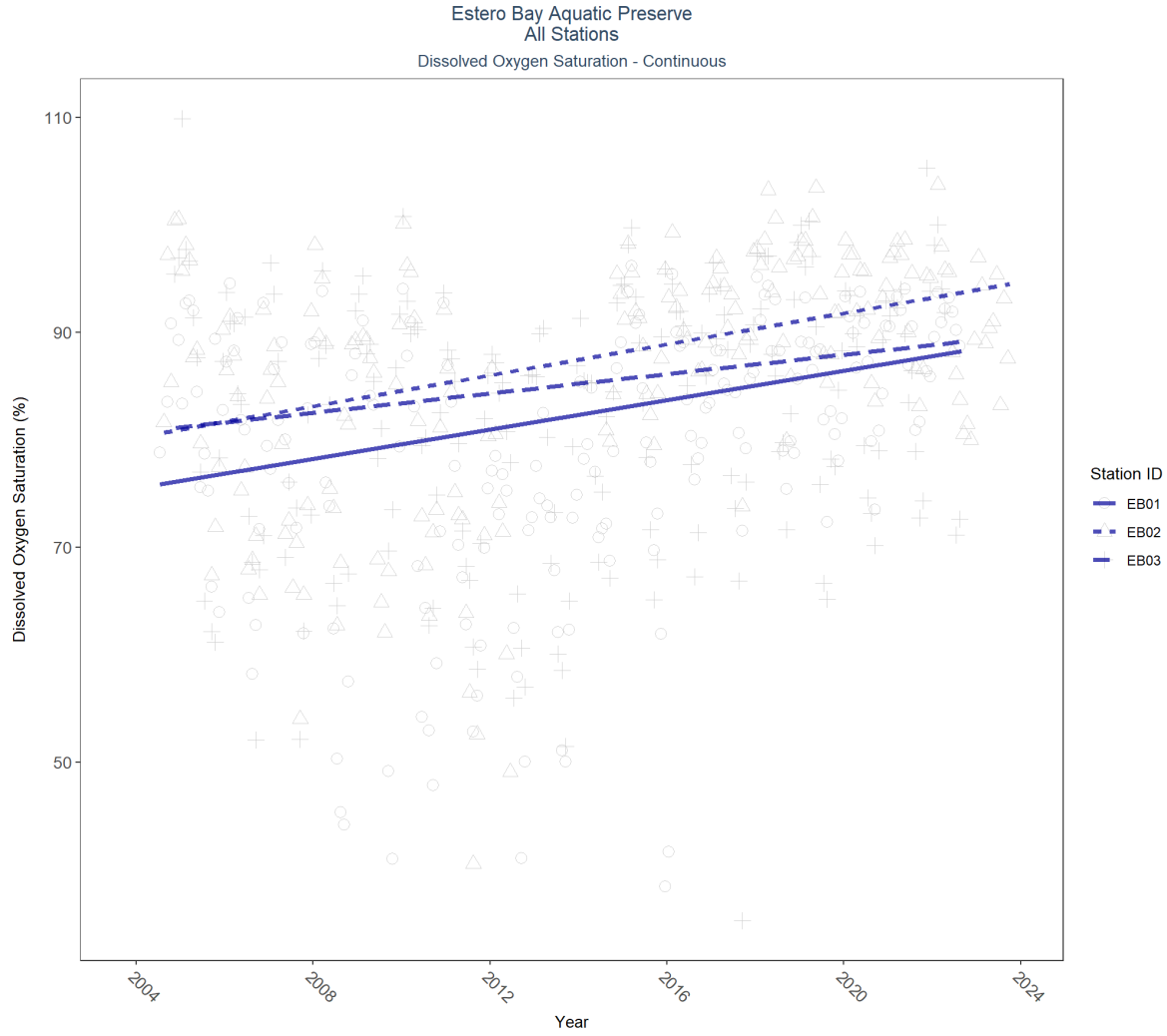
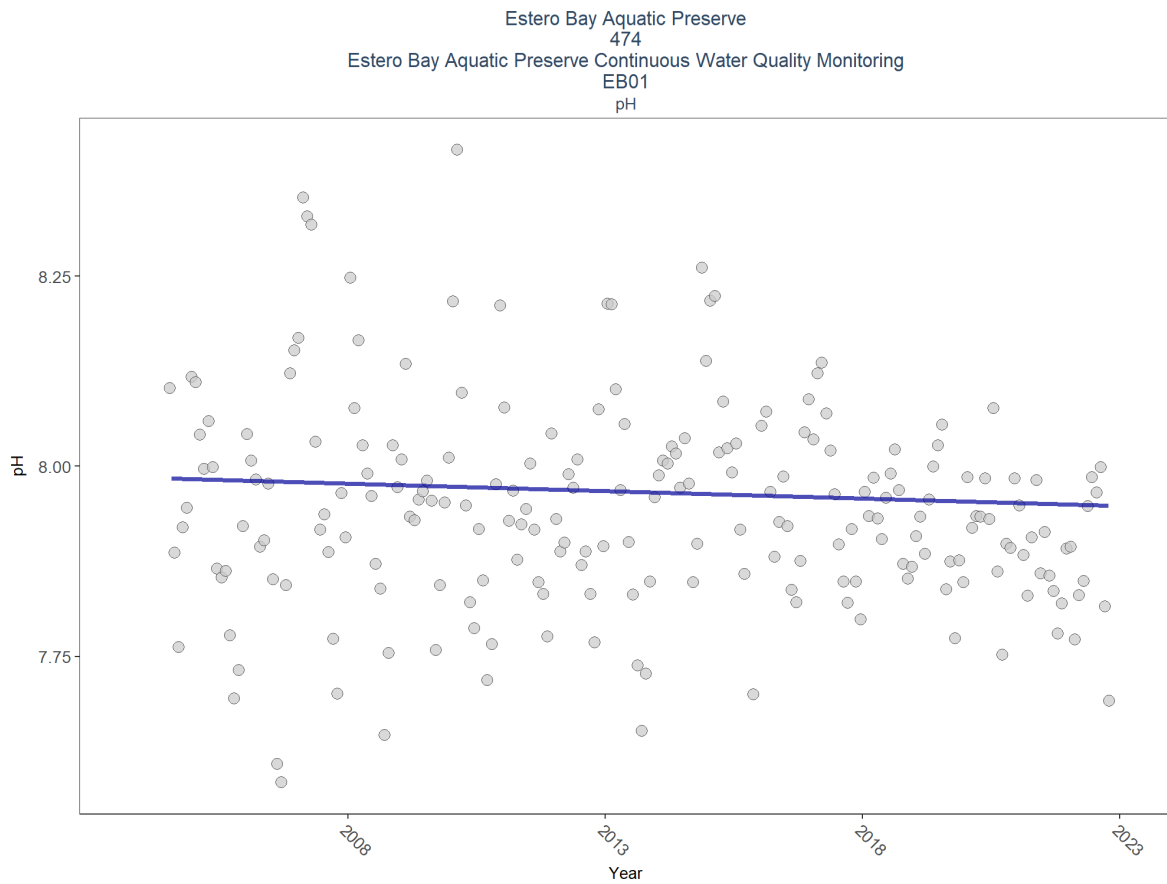


Table 2: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	480233	19	2004 - 2022	81.6	0.31	75.5	0.68	0.0000
EB02	446145	19	2004 - 2023	87.6	0.38	80.21	0.72	0.0000
EB03	441227	19	2004 - 2022	83.7	0.25	80.69	0.45	0.0000
EB04	76225	3	2021 - 2023	81.0	-	-	-	-

pH

EB01

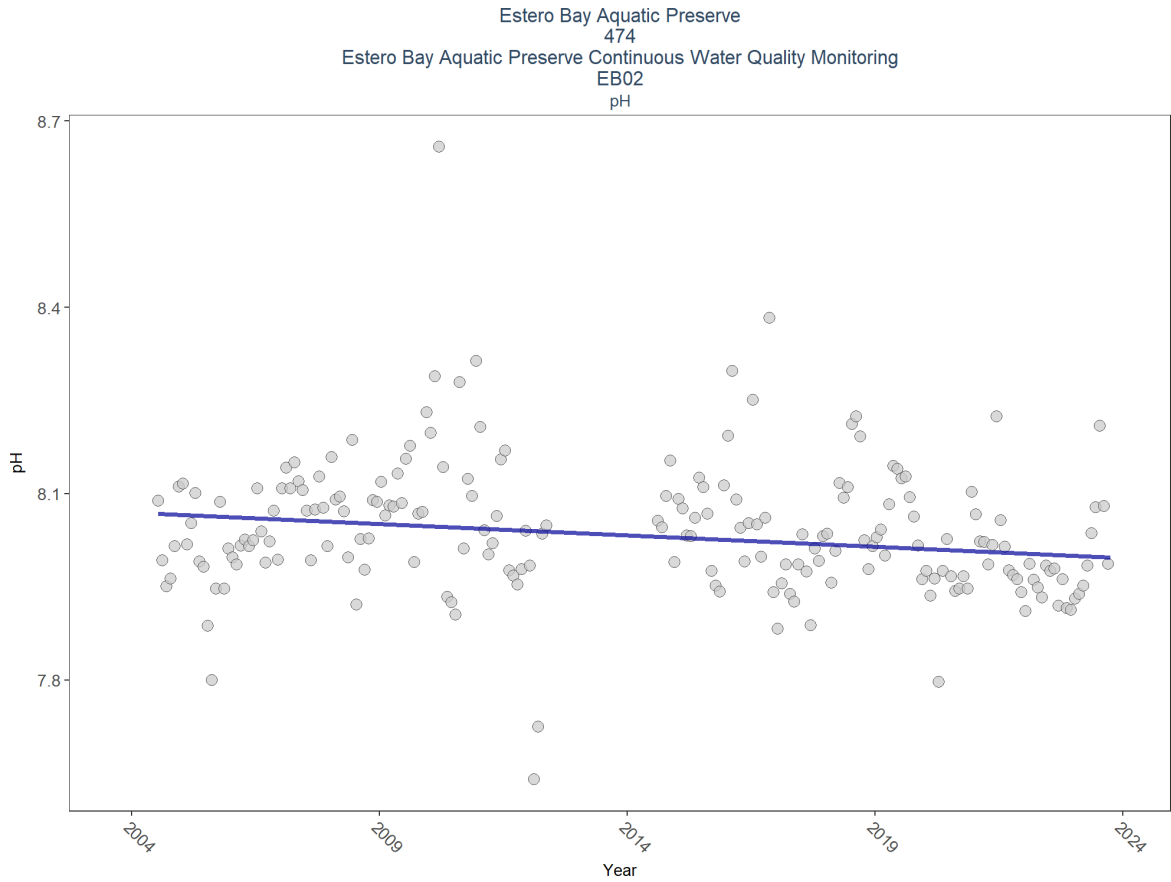


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	562188	19	7.9	TRUE	-0.0841	0.1157	-0.001947073	7.985223	27.3963	0.004	0

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB02

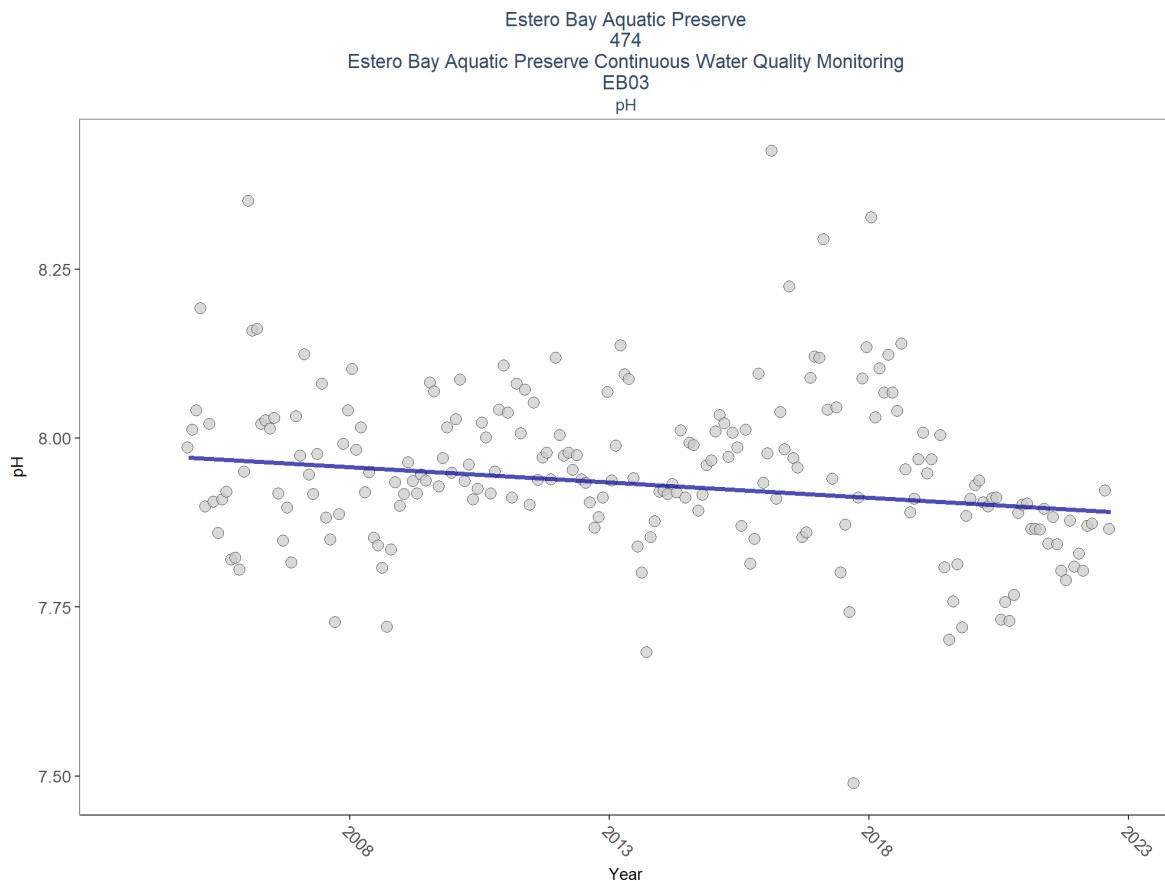


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	512064	19	8	TRUE	-0.1672	0.0013	-0.003690744	8.070007	15.9059	0.1447	-1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	525178	19	8	TRUE	-0.1705	0.0007	-0.004519888	7.974864	5.7266	0.891	-1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

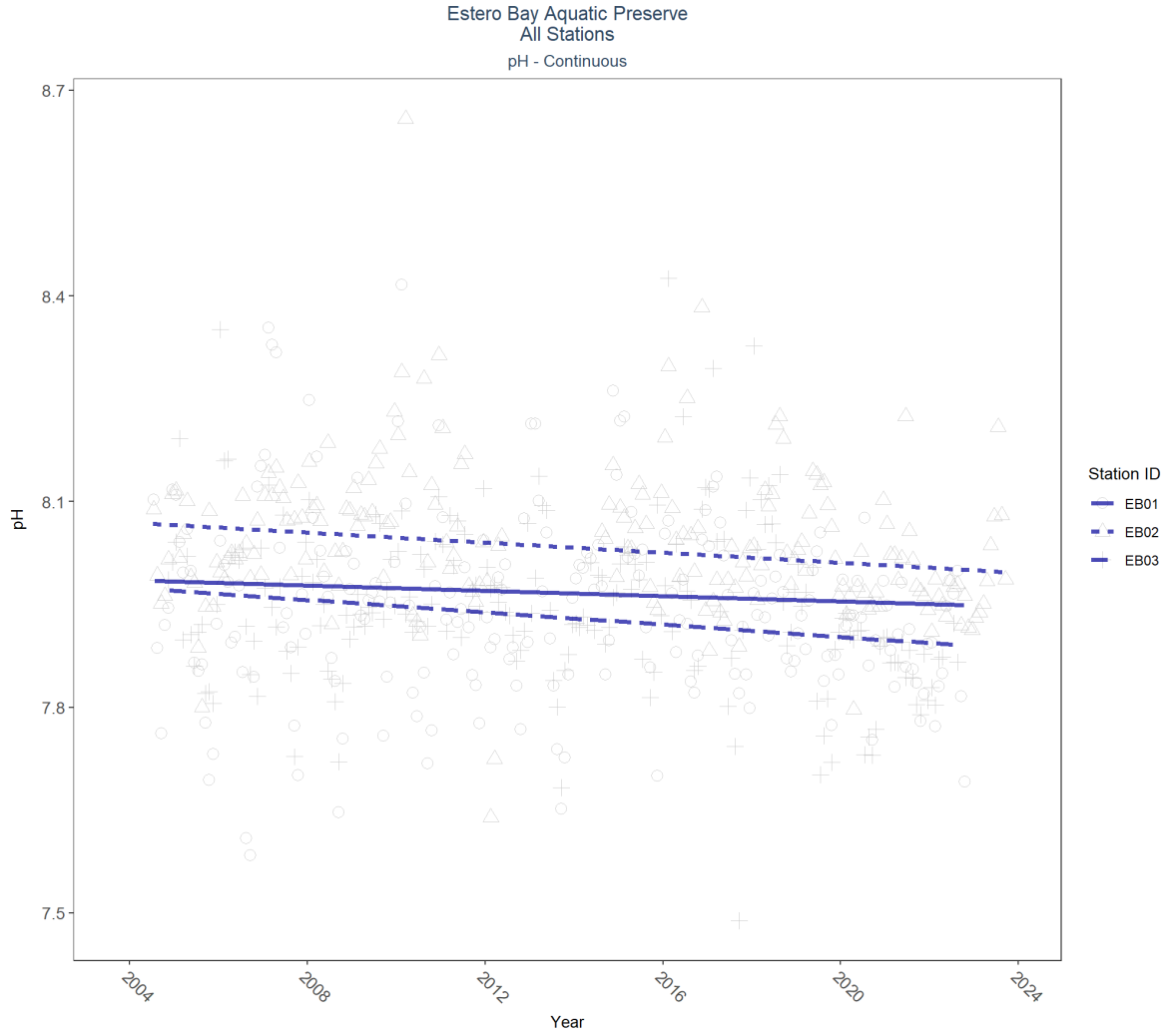
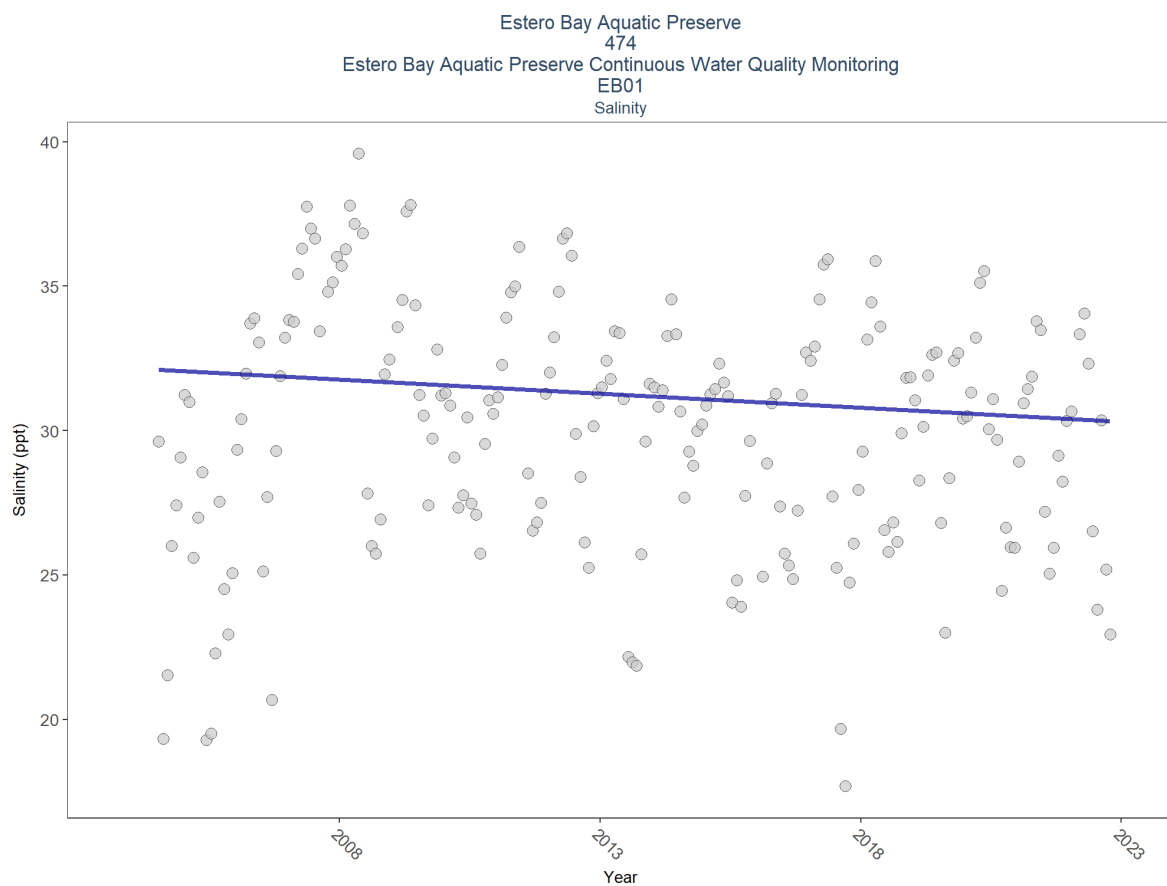


Table 3: Seasonal Kendall-Tau Results for All Stations - pH

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	562188	19	2004 - 2022	7.9	-0.08	7.99	0	0.1157
EB02	512064	19	2004 - 2023	8.0	-0.17	8.07	0	0.0013
EB03	525178	19	2004 - 2022	8.0	-0.17	7.97	0	0.0007
EB04	78723	3	2021 - 2023	7.8	-	-	-	-

Salinity

EB01

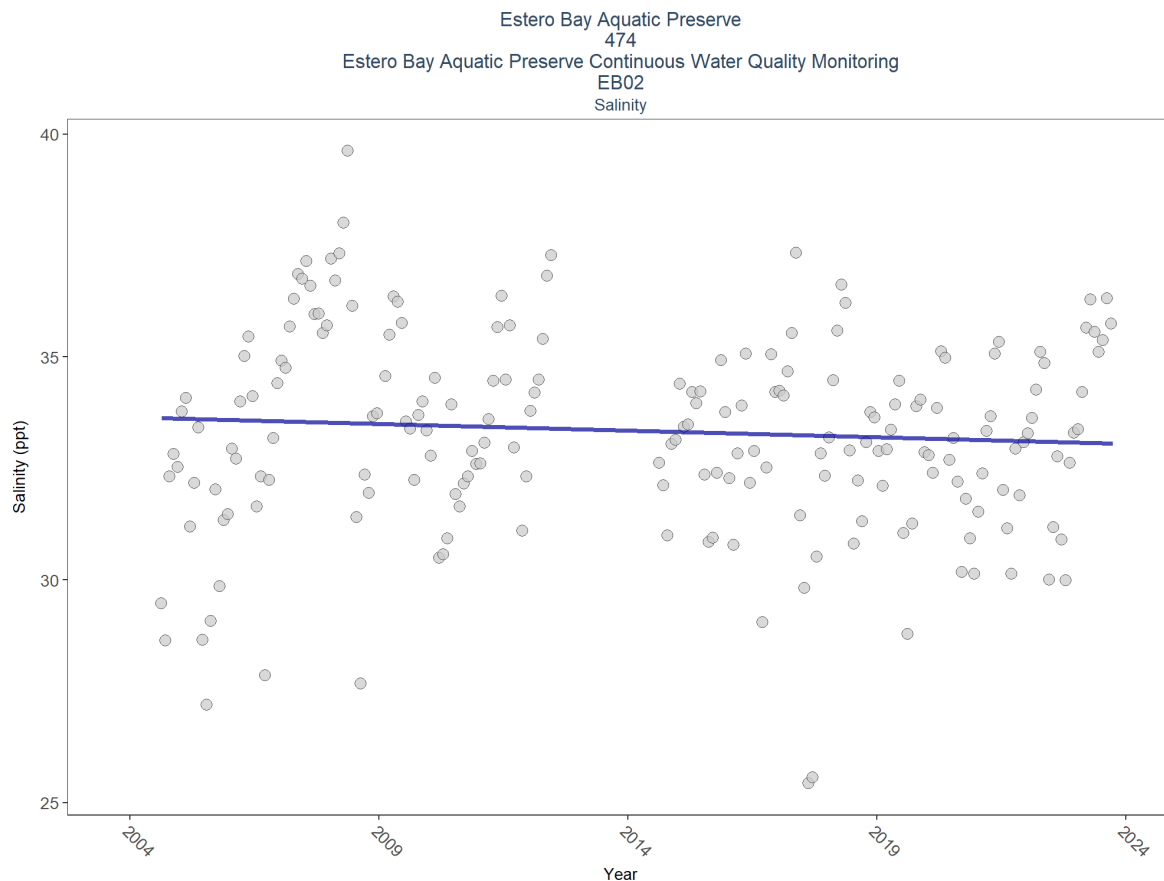


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	567163	19	30.7	TRUE	-0.1318	0.0110	-0.09800266	32.17017	4.7446	0.9429	-1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB02

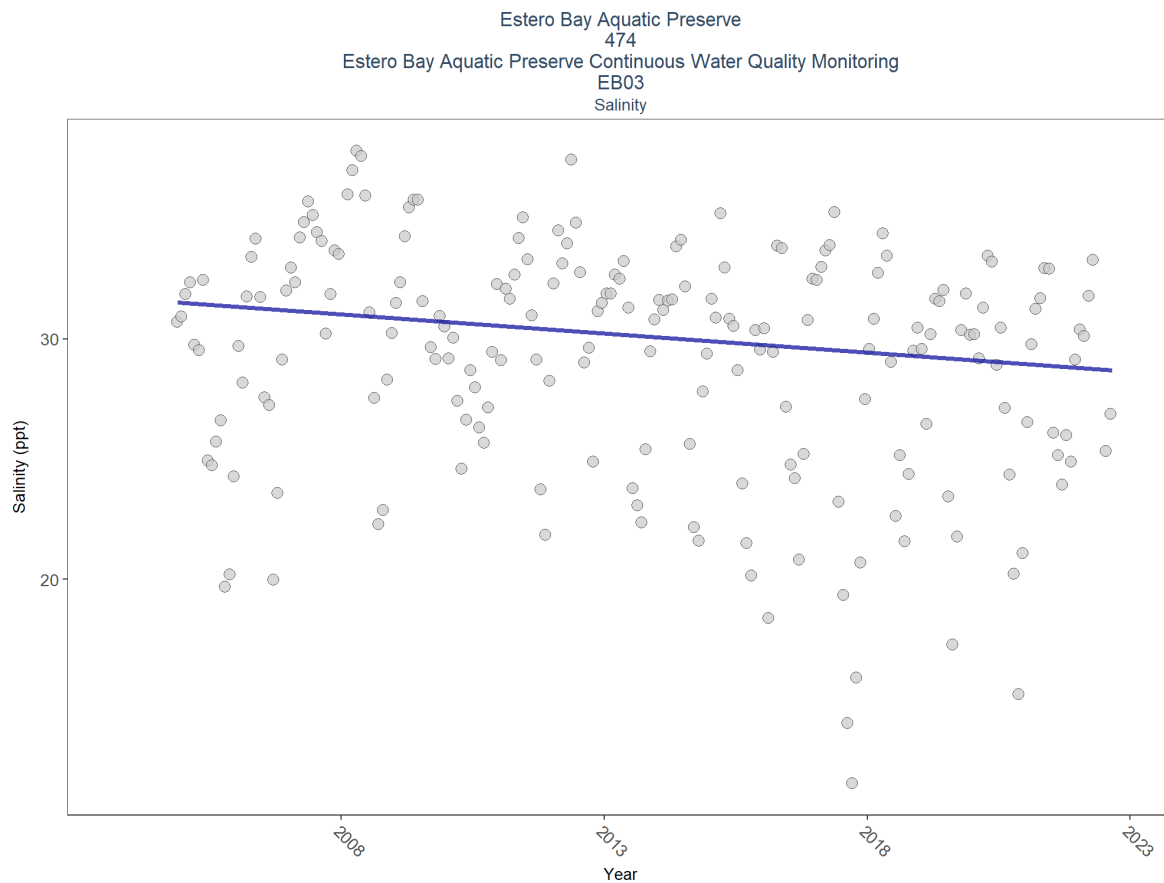


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	531026	19	33.6	TRUE	-0.0697	0.1773	-0.02996144	33.64782	4.3561	0.9583	0

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	533169	19	30.9	TRUE	-0.2138	0.0000	-0.1580336	31.65294	4.2465	0.9621	-1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

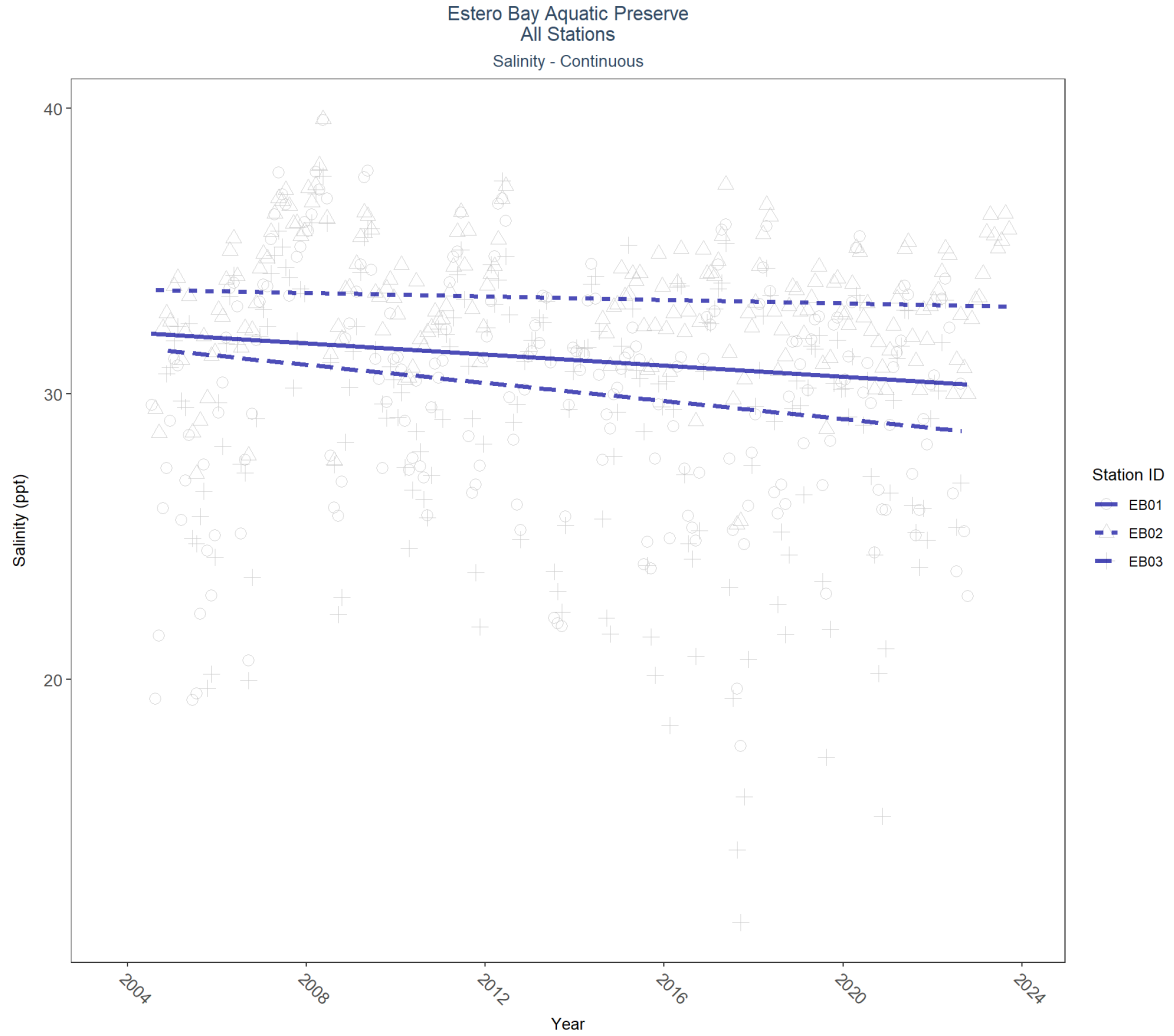
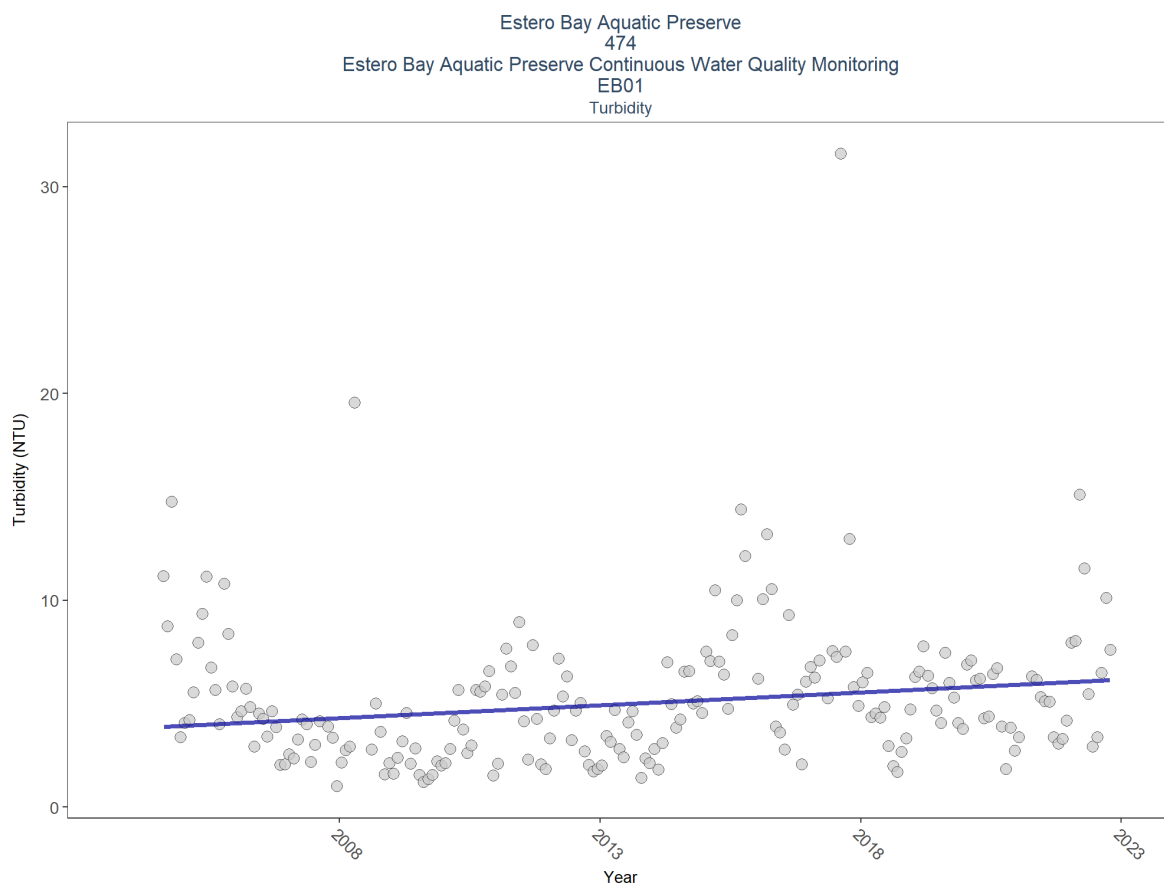


Table 4: Seasonal Kendall-Tau Results for All Stations - Salinity

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	567163	19	2004 - 2022	30.7	-0.13	32.17	-0.1	0.0110
EB02	531026	19	2004 - 2023	33.6	-0.07	33.65	-0.03	0.1773
EB03	533169	19	2004 - 2022	30.9	-0.21	31.65	-0.16	0.0000
EB04	75655	3	2021 - 2023	28.4	-	-	-	-

Turbidity

EB01

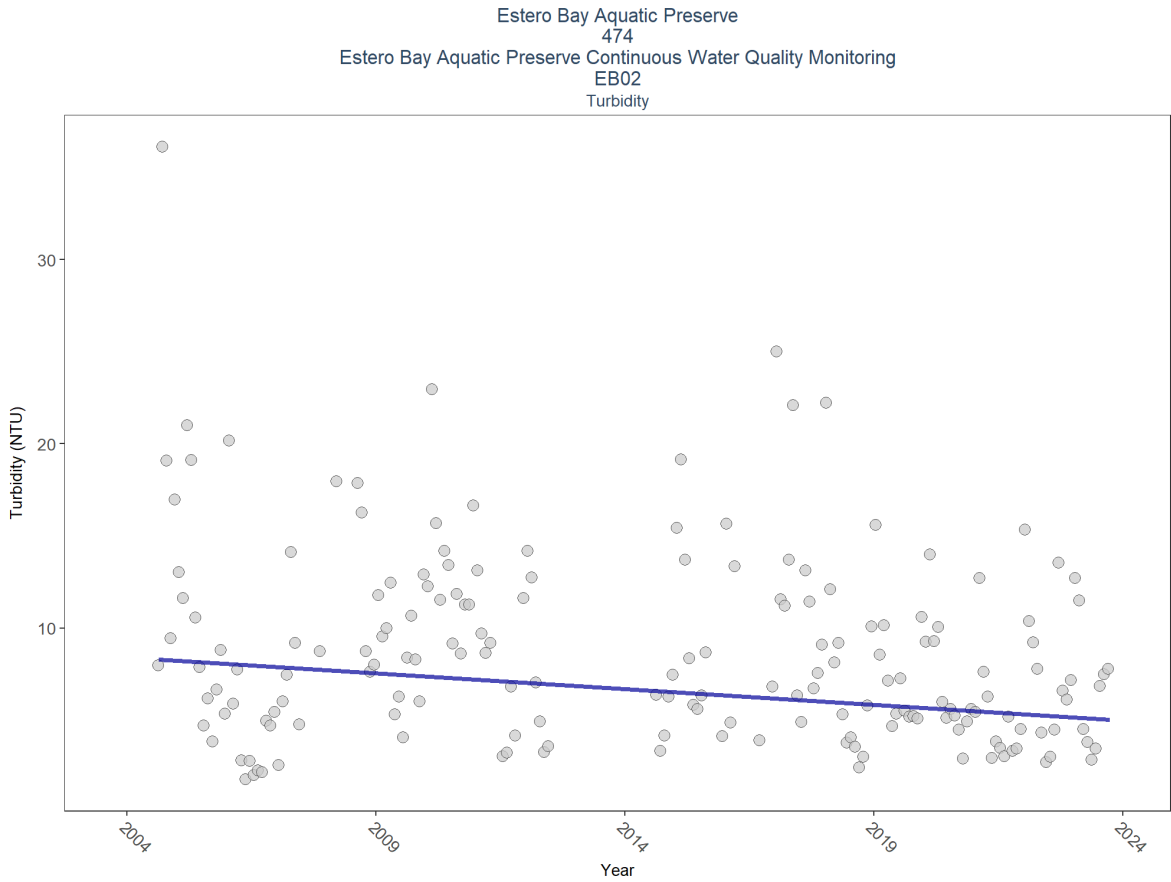


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	510965	19	4	TRUE	0.1797	0.0005	0.1255335	3.788219	11.0838	0.4363	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

EB02

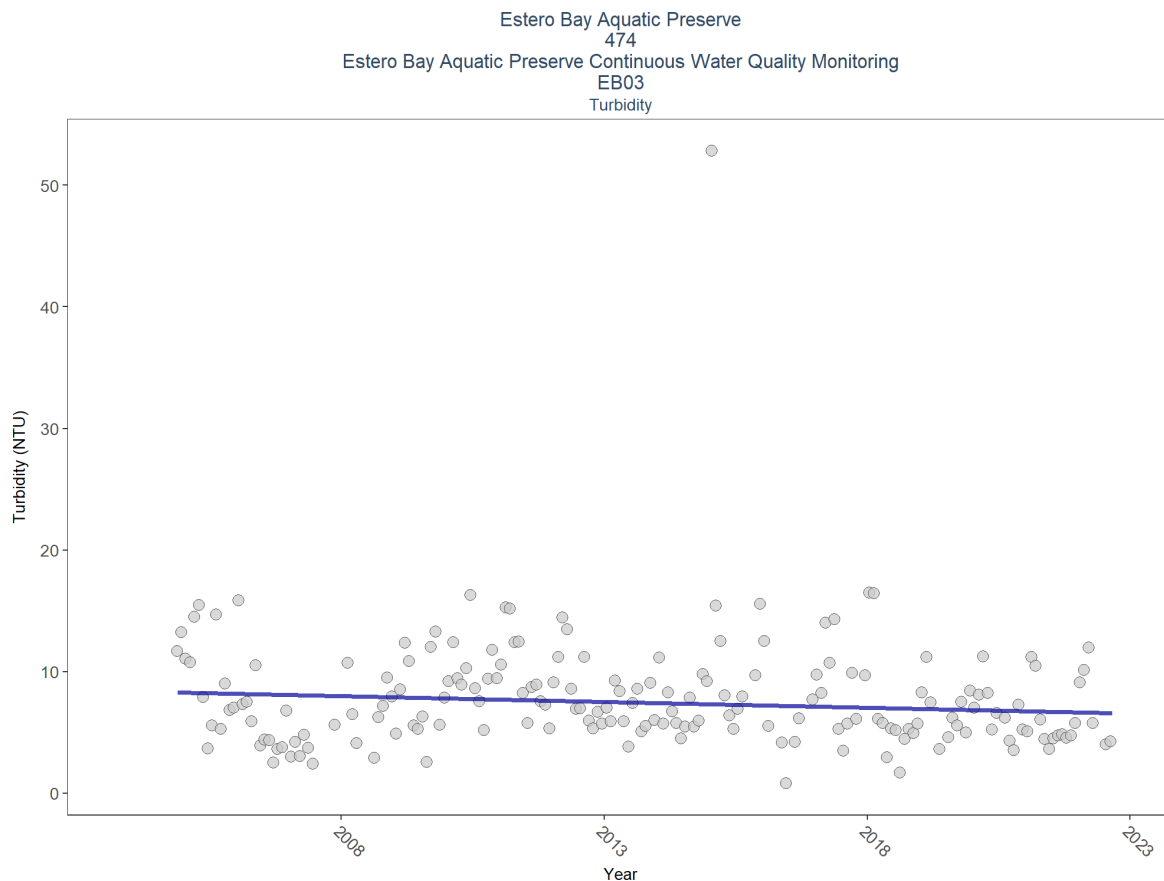


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	428586	19	5	TRUE	-0.1893	0.0009	-0.1719823	8.407386	13.3708	0.2698	-1

p < 0.00005 appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	413599	19	5	TRUE	-0.1336	0.0190	-0.09501454	8.373902	7.8047	0.7307	-1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

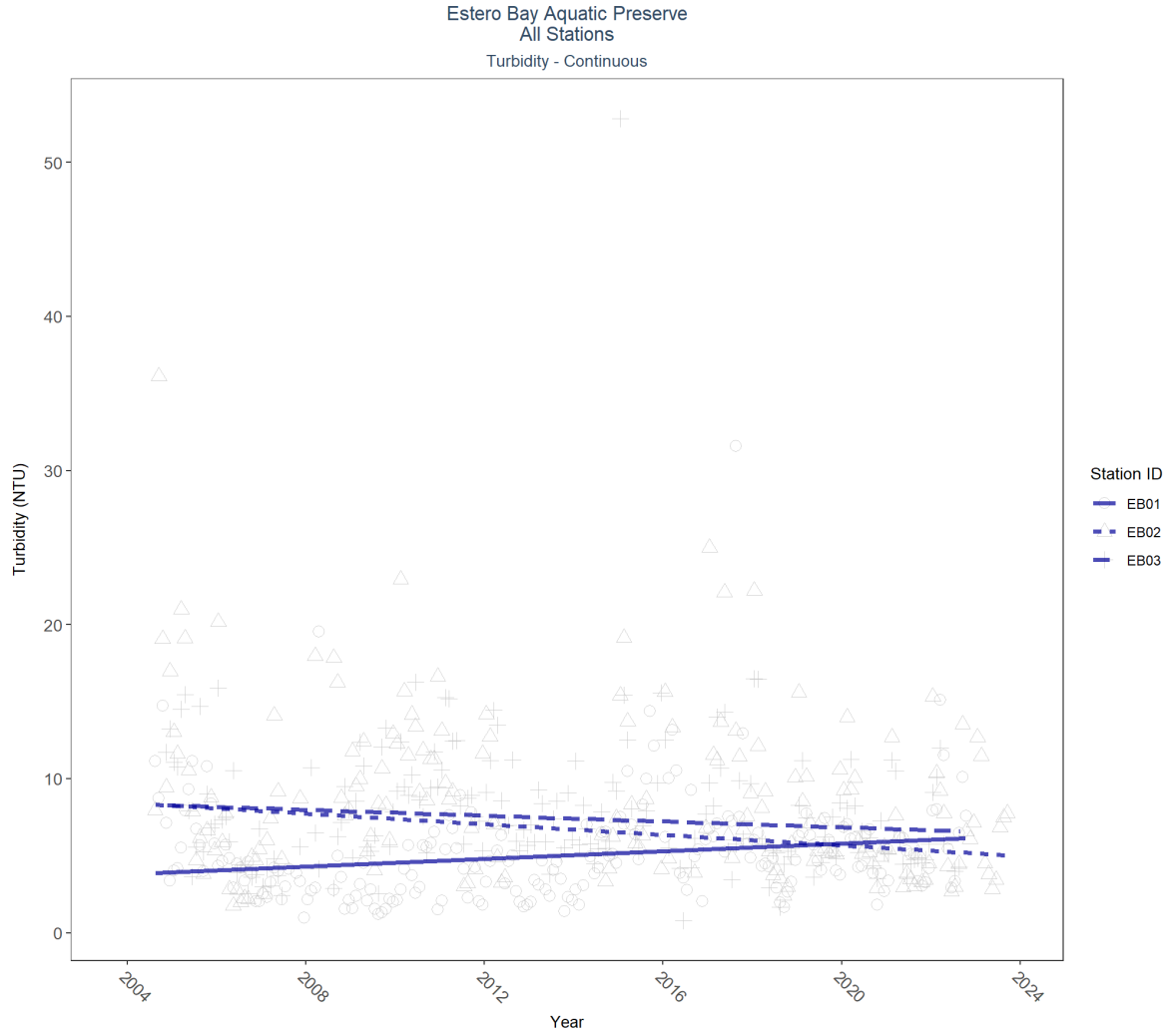
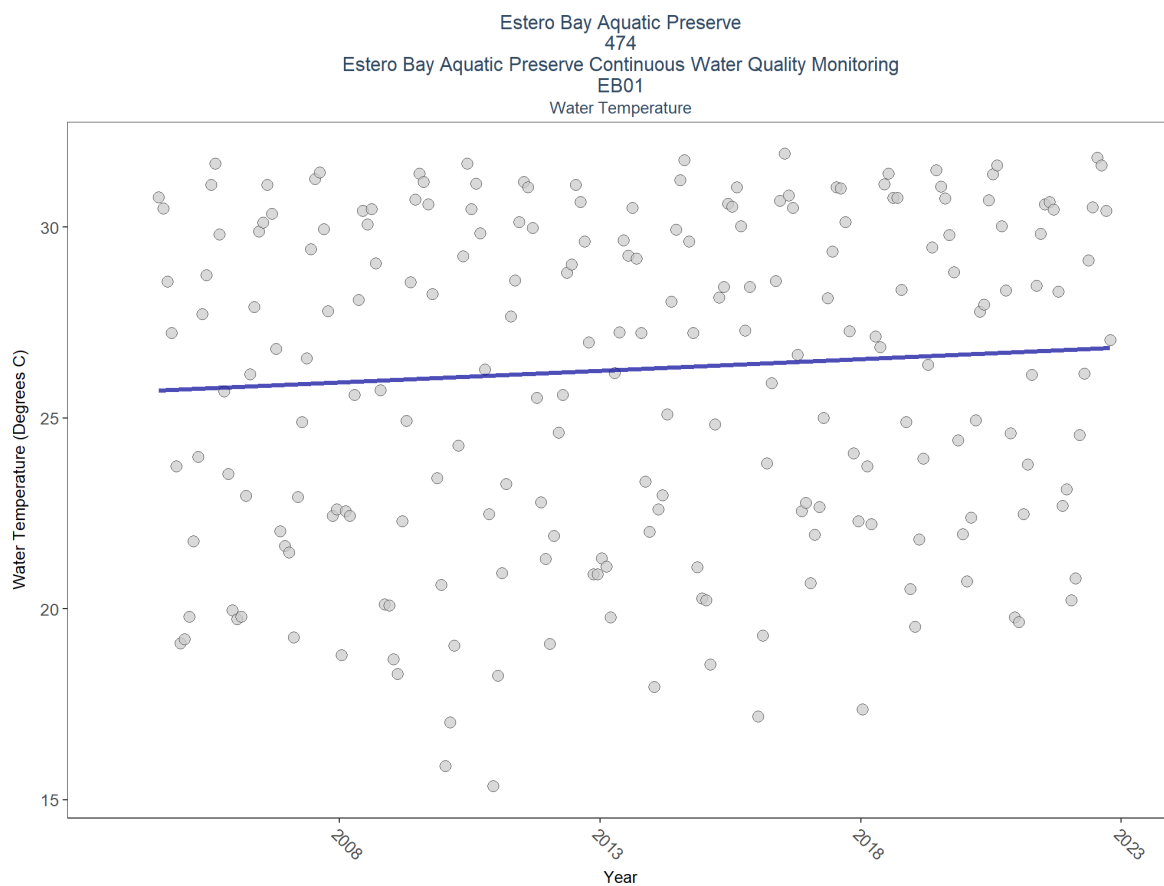


Table 5: Seasonal Kendall-Tau Results for All Stations - Turbidity

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	510965	19	2004 - 2022	4	0.18	3.79	0.13	0.0005
EB02	428586	19	2004 - 2023	5	-0.19	8.41	-0.17	0.0009
EB03	413599	19	2004 - 2022	5	-0.13	8.37	-0.1	0.0190
EB04	73526	3	2021 - 2023	5	-	-	-	-

Water Temperature

EB01

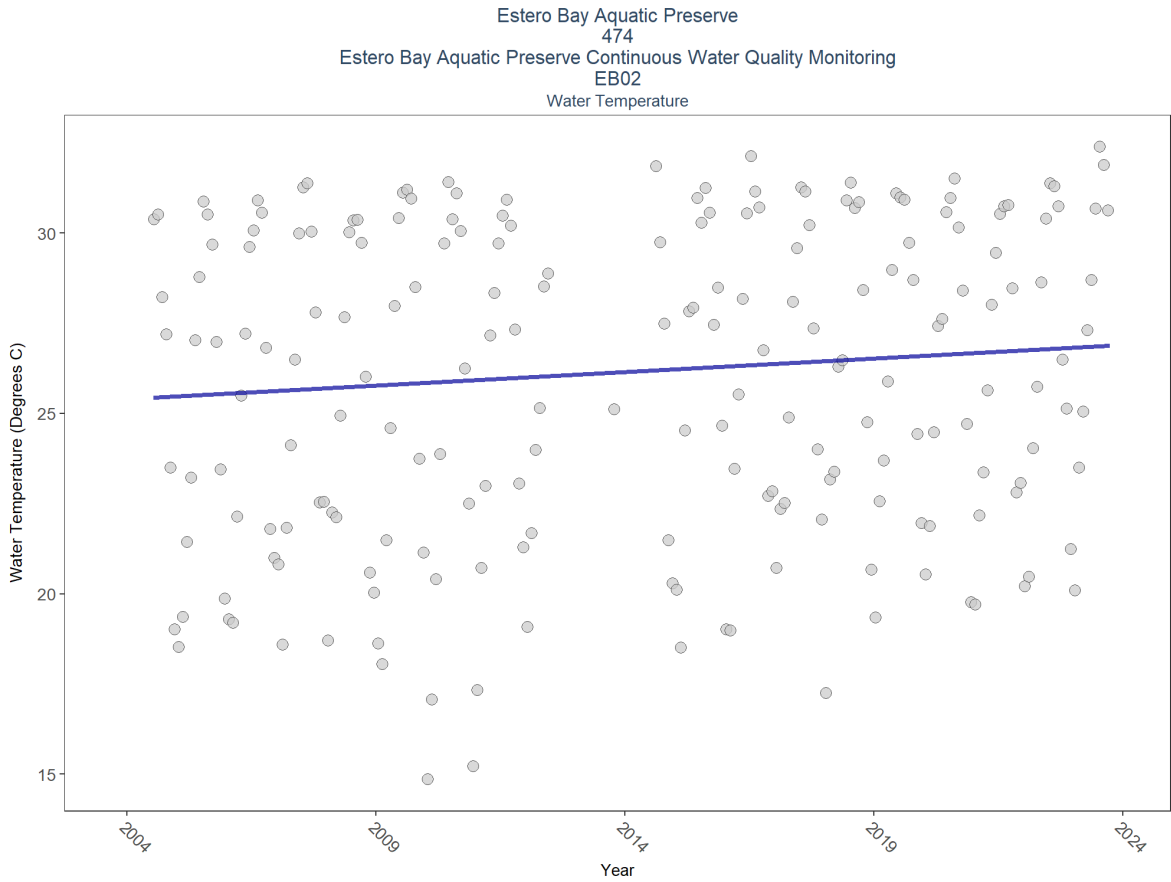


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	617636	19	26.8	TRUE	0.2487	0.0000	0.06075982	25.69058	6.3259	0.8508	1

$p < 0.00005$ appear as 0 due to rounding.

*SennIntercept is intercept value at beginning of
record for monitoring location*

EB02

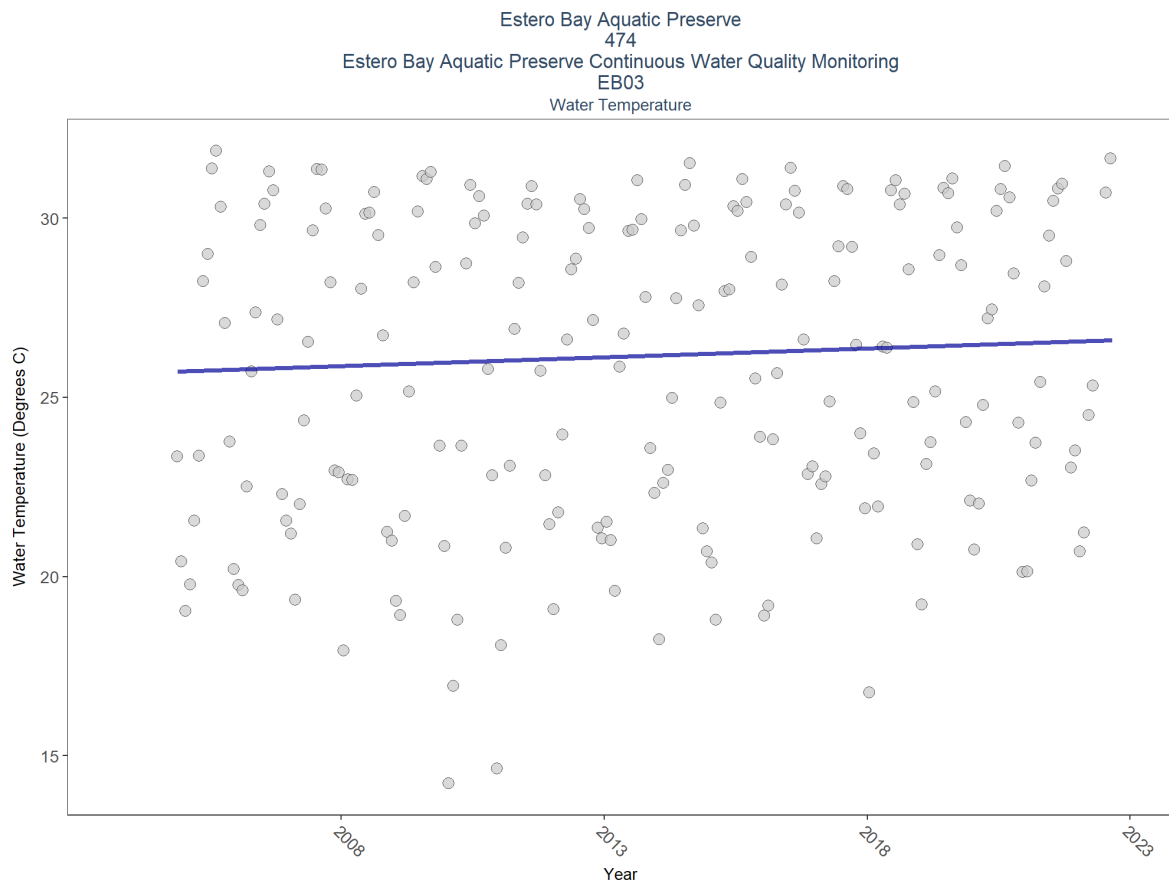


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	574714	20	26.7	TRUE	0.3482	0.0000	0.07516799	25.39528	3.1459	0.9887	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of
record for monitoring location

EB03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	572084	19	26.5	TRUE	0.1722	0.0006	0.04927919	25.67835	7.636	0.7455	1

$p < 0.00005$ appear as 0 due to rounding.

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

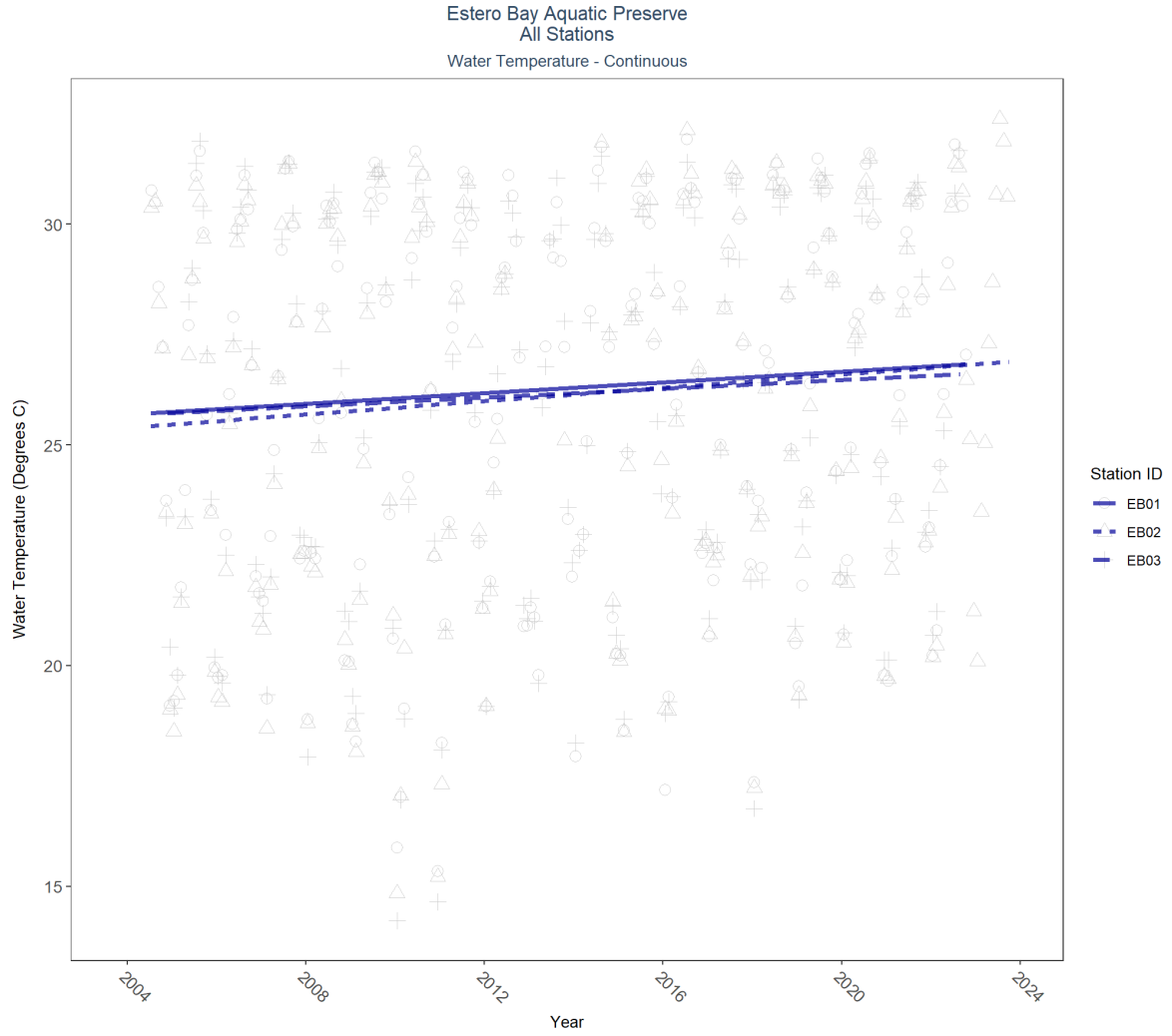


Table 6: Seasonal Kendall-Tau Results for All Stations - Water Temperature

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
EB01	617636	19	2004 - 2022	26.8	0.25	25.69	0.06	0.0000
EB02	574714	20	2004 - 2023	26.7	0.35	25.4	0.08	0.0000
EB04	83717	3	2021 - 2023	28.1	-	-	-	-
EB03	572084	19	2004 - 2022	26.5	0.17	25.68	0.05	0.0006