

Biscayne Bay Aquatic Preserve

SEACAR Discrete Water Quality Analysis

Last compiled on 26 June, 2024

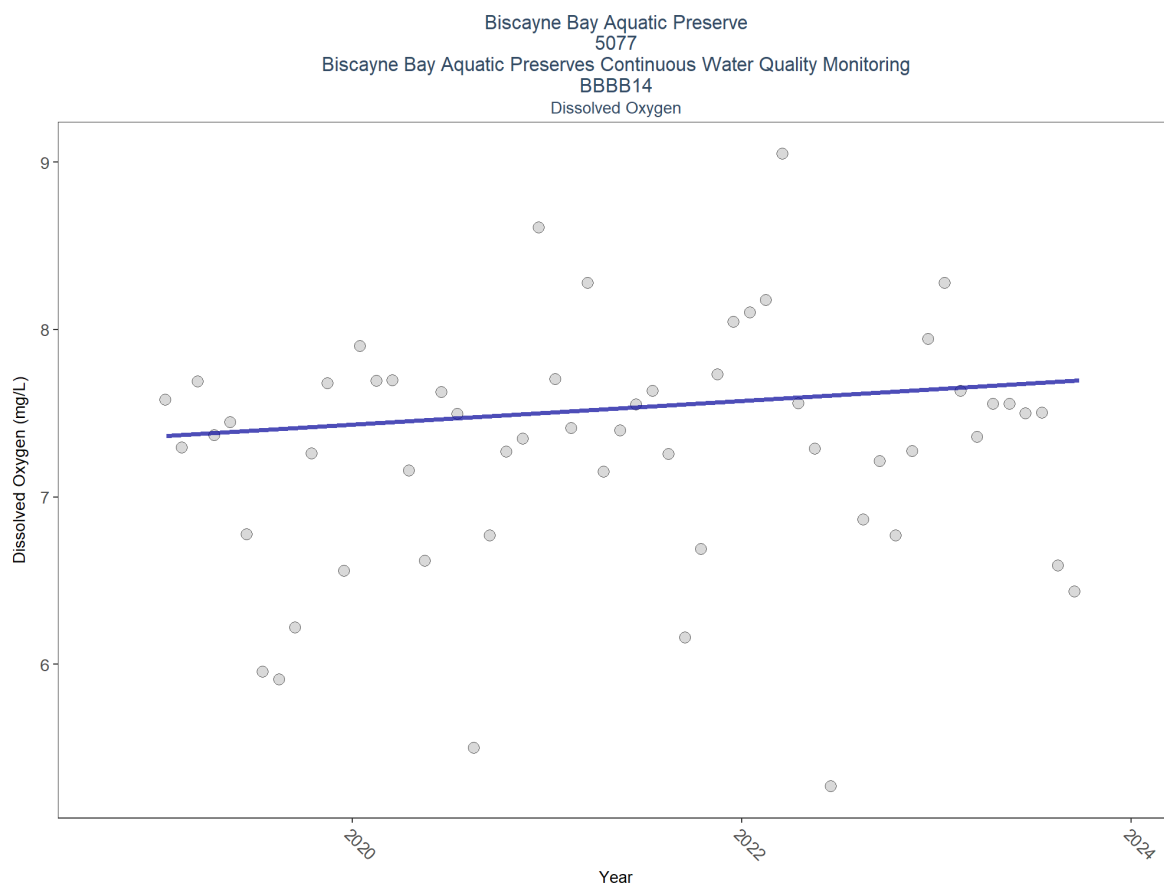
Contents

Parameters	2
Dissolved Oxygen	3
BBBB14	3
BBJT71	4
All Stations Combined	5
Dissolved Oxygen Saturation	6
BBBB14	6
BBJT71	7
All Stations Combined	8
pH	9
BBJT71	9
BBLR03	10
BBBB14	11
All Stations Combined	12
Salinity	13
BBLR03	13
BBJT71	14
BBBB14	15
All Stations Combined	16
Turbidity	17
BBBB14	17
BBJT71	18
BBLR03	19
All Stations Combined	20
Water Temperature	21
BBJT71	21
BBBB14	22
BBLR03	23
All Stations Combined	24

Parameters

Dissolved Oxygen

BBBB14

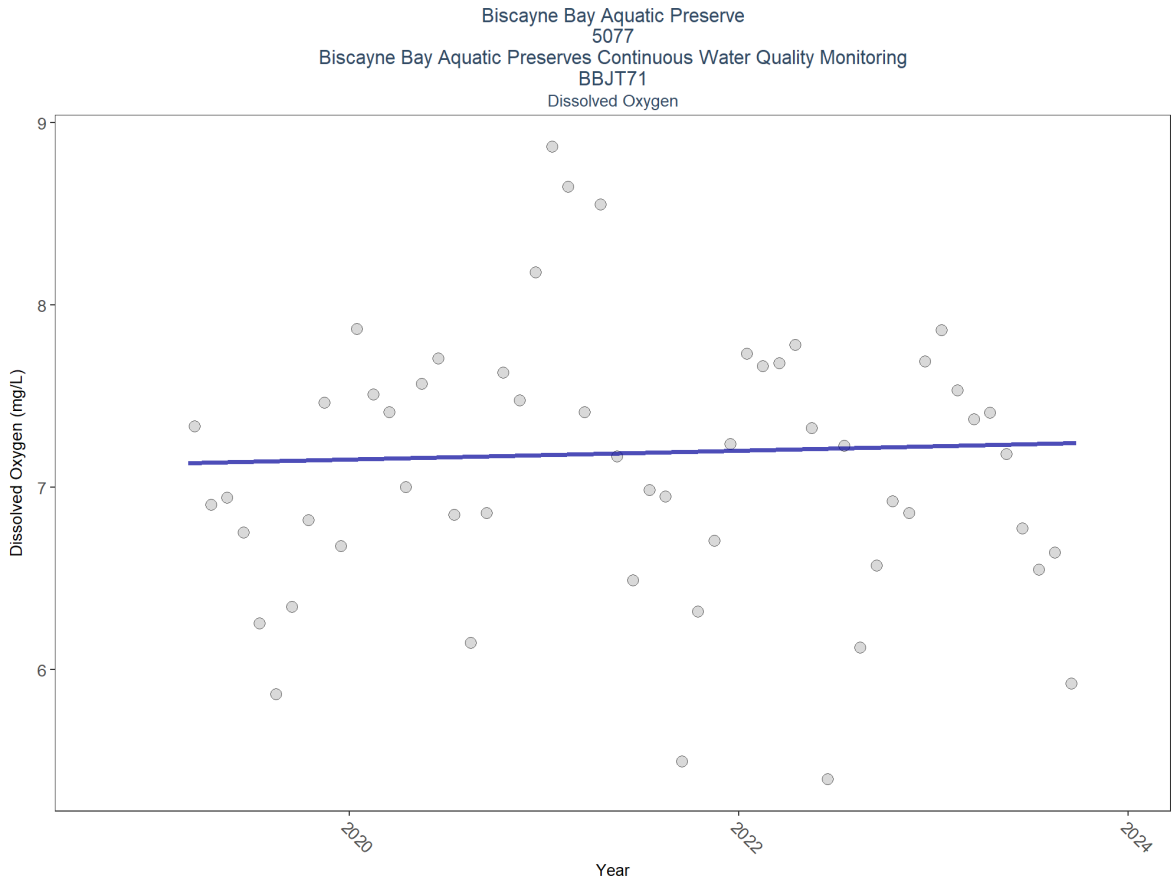


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	143962	5	7.3	TRUE	0.1786	0.1427	0.07062593	7.36088	7.0092	0.7983	0

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

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

BBJT71



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	159528	5	7	TRUE	0.103	0.3845	0.02378992	7.130809	5.3144	0.915	0

p < 0.00005 appear as 0 due to rounding.

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

All Stations Combined

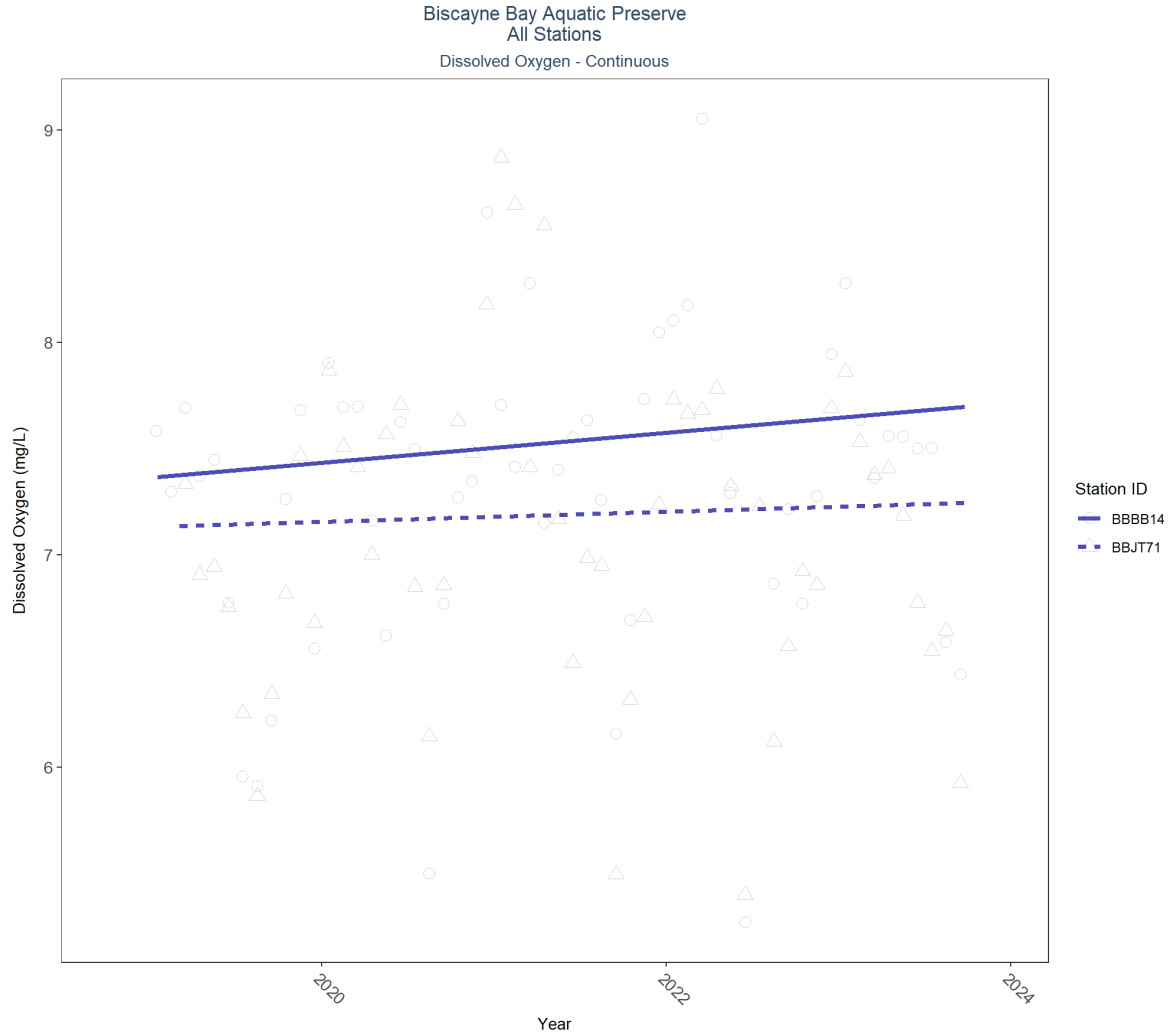
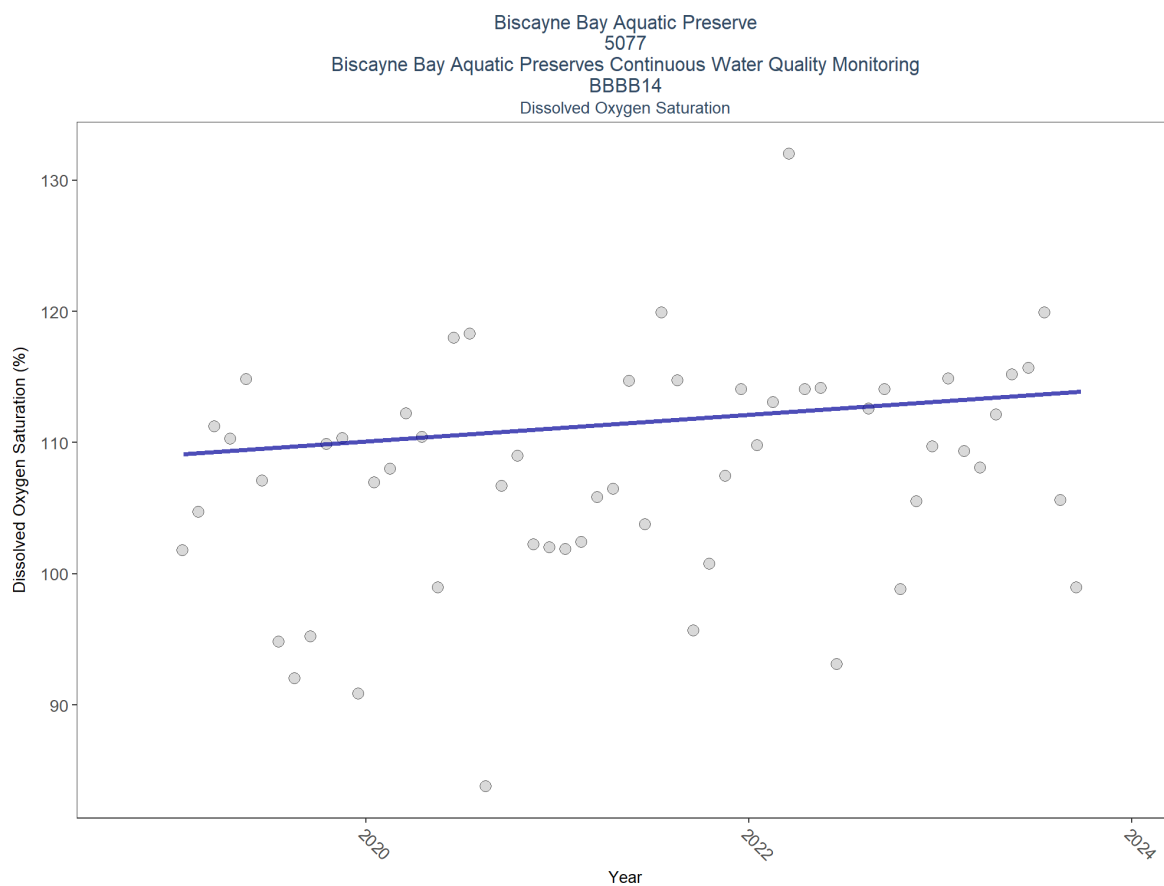


Table 1: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBMRDW	84141	3	2021 - 2023	4.5	-	-	-	-
BBMRRB	59422	2	2022 - 2023	6.4	-	-	-	-
BBBB14	143962	5	2019 - 2023	7.3	0.18	7.36	0.07	0.1427
BBLR03	112890	4	2020 - 2023	4.1	-	-	-	-
BBCWA4	53909	2	2022 - 2023	6.5	-	-	-	-
BBJT71	159528	5	2019 - 2023	7.0	0.1	7.13	0.02	0.3845

Dissolved Oxygen Saturation

BBBB14

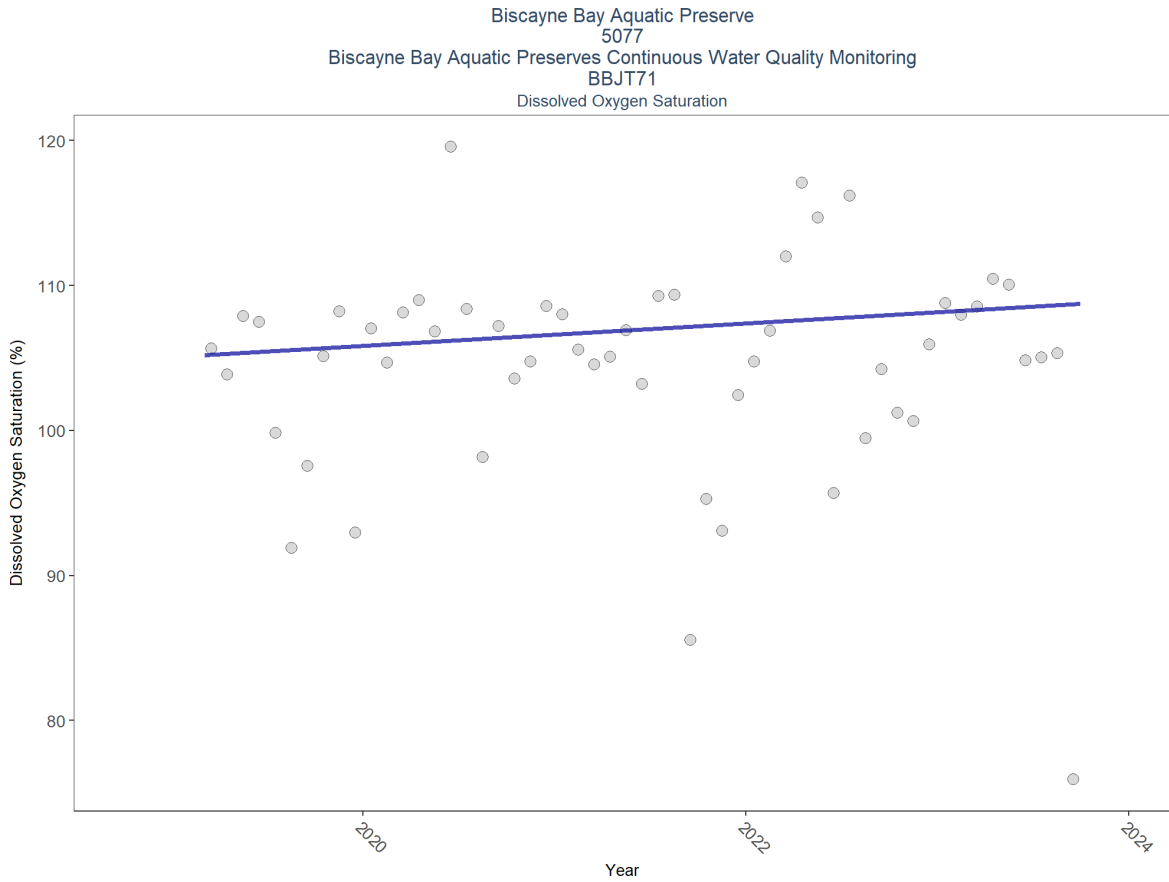


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	143703	5	105.3	TRUE	0.1964	0.1052	1.017492	109.0802	13.3277	0.2724	0

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

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

BBJT71



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	159687	5	102.2	TRUE	0.1697	0.1790	0.770574	105.0824	16.127	0.1365	0

p < 0.00005 appear as 0 due to rounding.

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

All Stations Combined

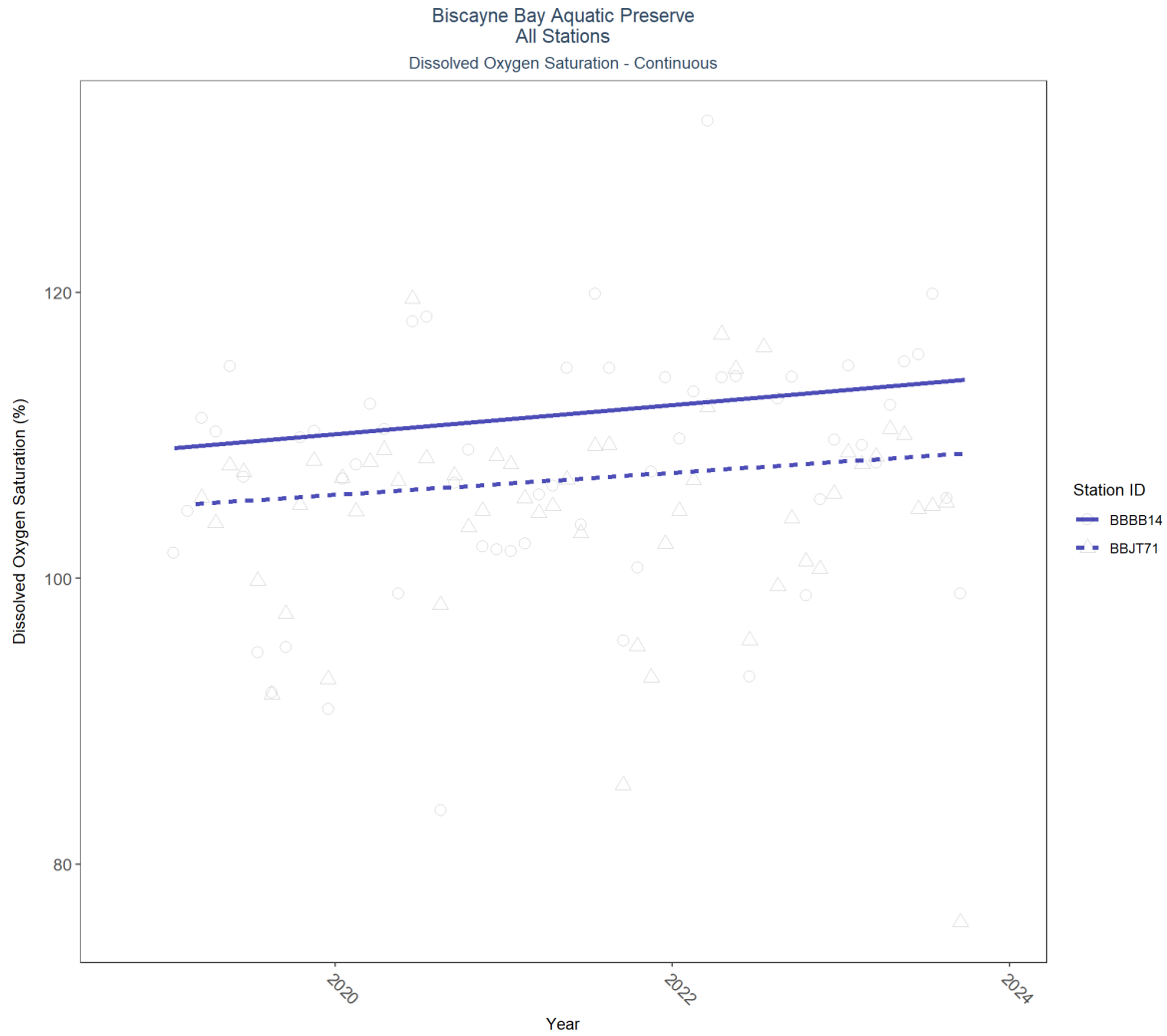
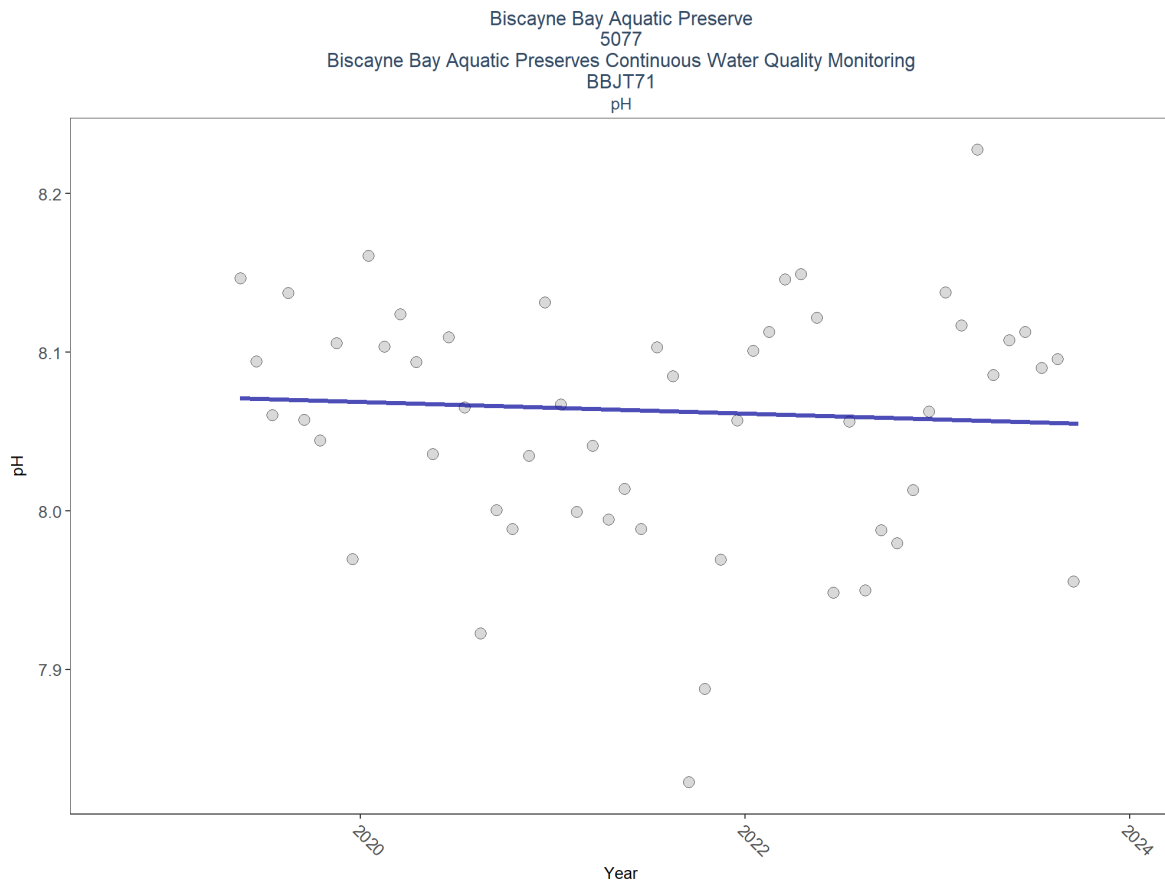


Table 2: Seasonal Kendall-Tau Results for All Stations - Dissolved Oxygen Saturation

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBBB14	143703	5	2019 - 2023	105.3	0.2	109.08	1.02	0.1052
BBCWA4	57632	2	2022 - 2023	98.0	-	-	-	-
BBJT71	159687	5	2019 - 2023	102.2	0.17	105.08	0.77	0.1790
BBMRDW	84142	3	2021 - 2023	60.3	-	-	-	-
BBMRRB	59430	2	2022 - 2023	96.2	-	-	-	-
BBLR03	112890	4	2020 - 2023	56.8	-	-	-	-

pH

BBJT71

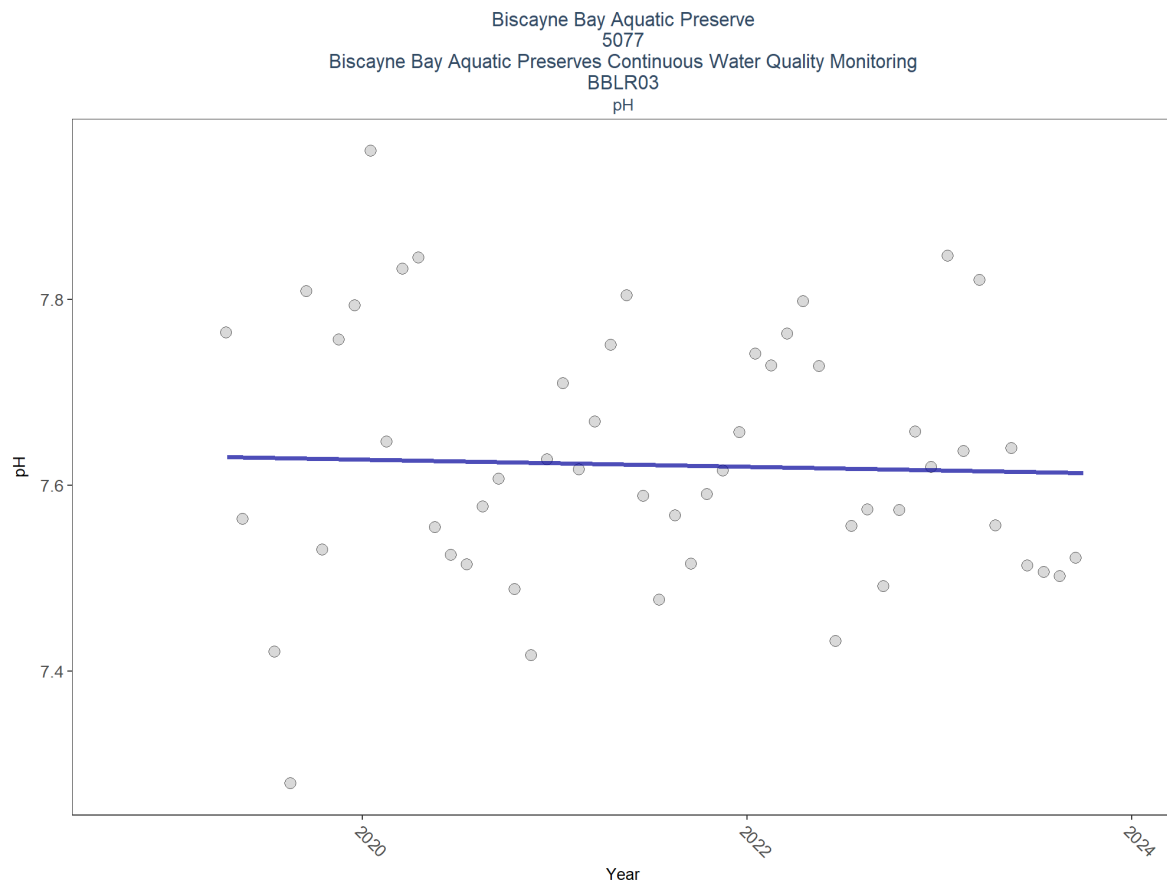


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	147940	5	8.1	TRUE	-0.0314	0.8026	-0.003627475	8.072432	10.4341	0.4918	0

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

SennIntercept is intercept value at beginning of
record for monitoring location

BBLR03

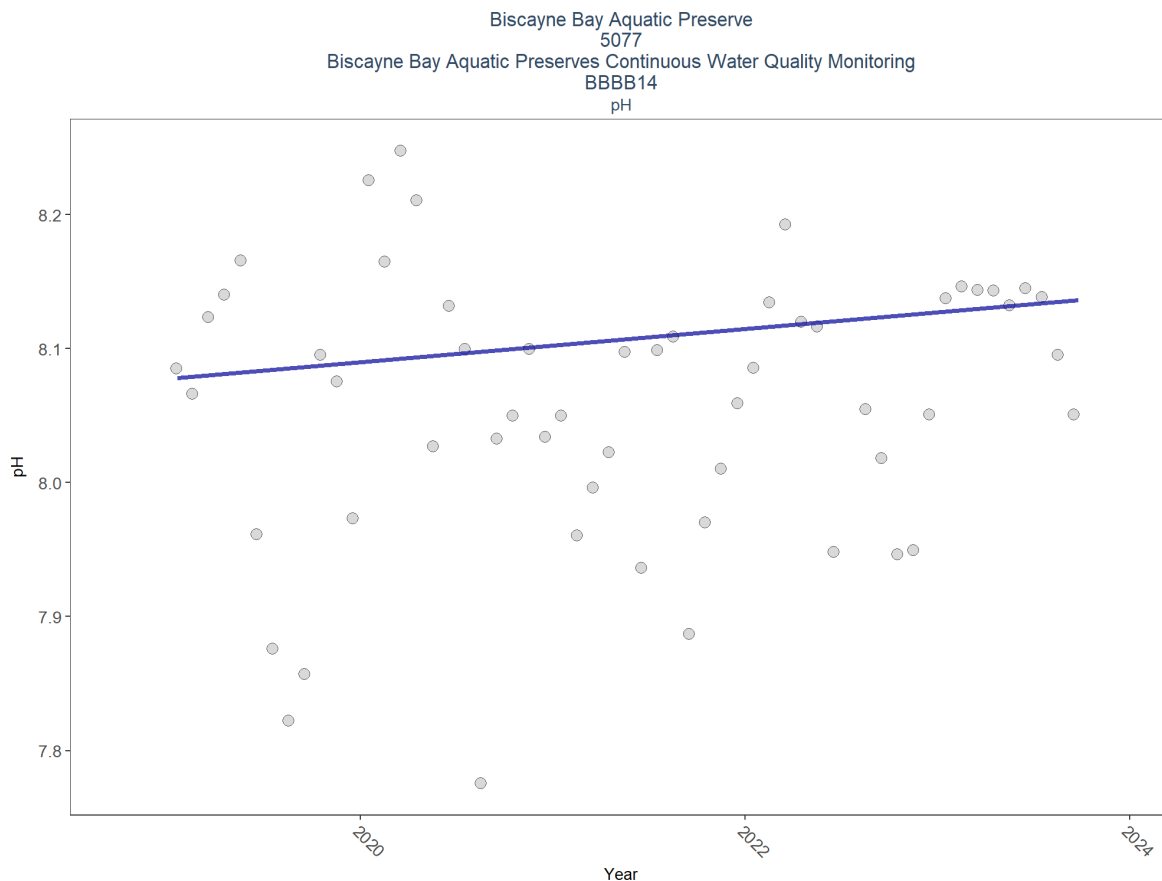


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	130226	5	7.6	TRUE	-0.0881	0.5597	-0.003929095	7.63163	6.6335	0.8279	0

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

SennIntercept is intercept value at beginning of
record for monitoring location

BBBB14



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	139889	5	8.1	TRUE	0.1369	0.2472	0.01236588	8.077659	12.6131	0.3194	0

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

SennIntercept is intercept value at beginning of
record for monitoring location

All Stations Combined

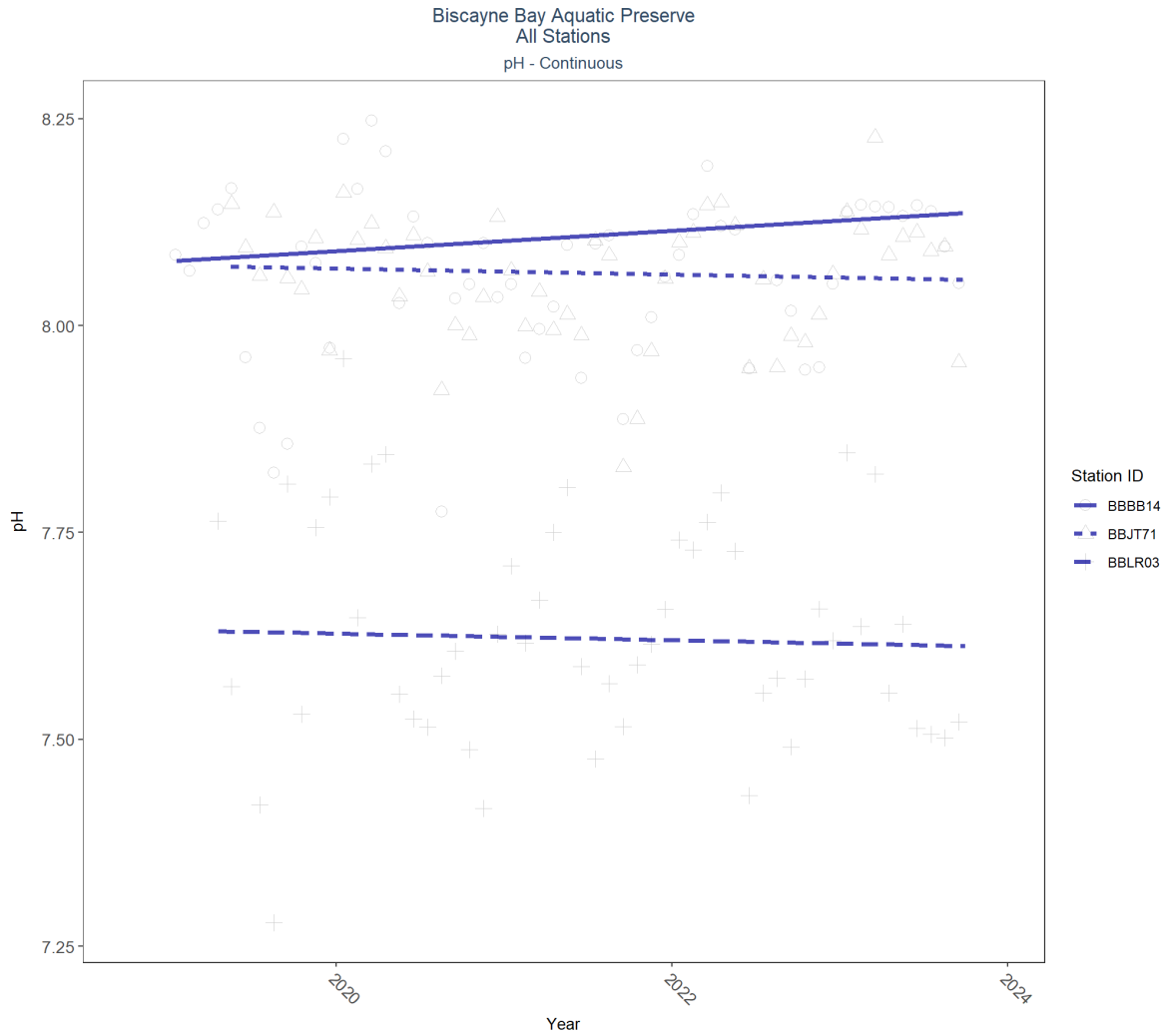
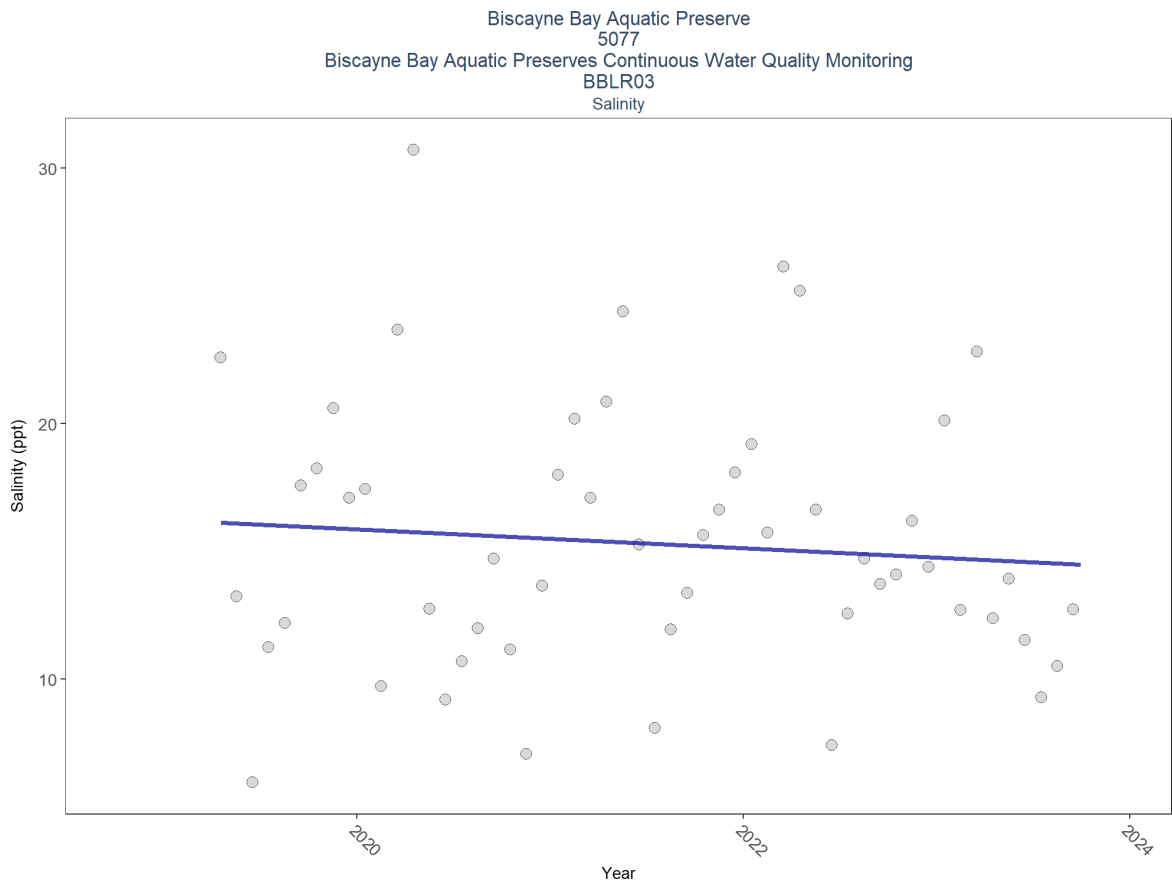


Table 3: Seasonal Kendall-Tau Results for All Stations - pH

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBJT71	147940	5	2019 - 2023	8.1	-0.03	8.07	0	0.8026
BBLR03	130226	5	2019 - 2023	7.6	-0.09	7.63	0	0.5597
BBBB14	139889	5	2019 - 2023	8.1	0.14	8.08	0.01	0.2472
BBCWA4	57814	2	2022 - 2023	8.0	-	-	-	-
BBMRDW	80596	3	2021 - 2023	7.6	-	-	-	-
BBMRRB	59474	2	2022 - 2023	8.0	-	-	-	-

Salinity
BBLR03

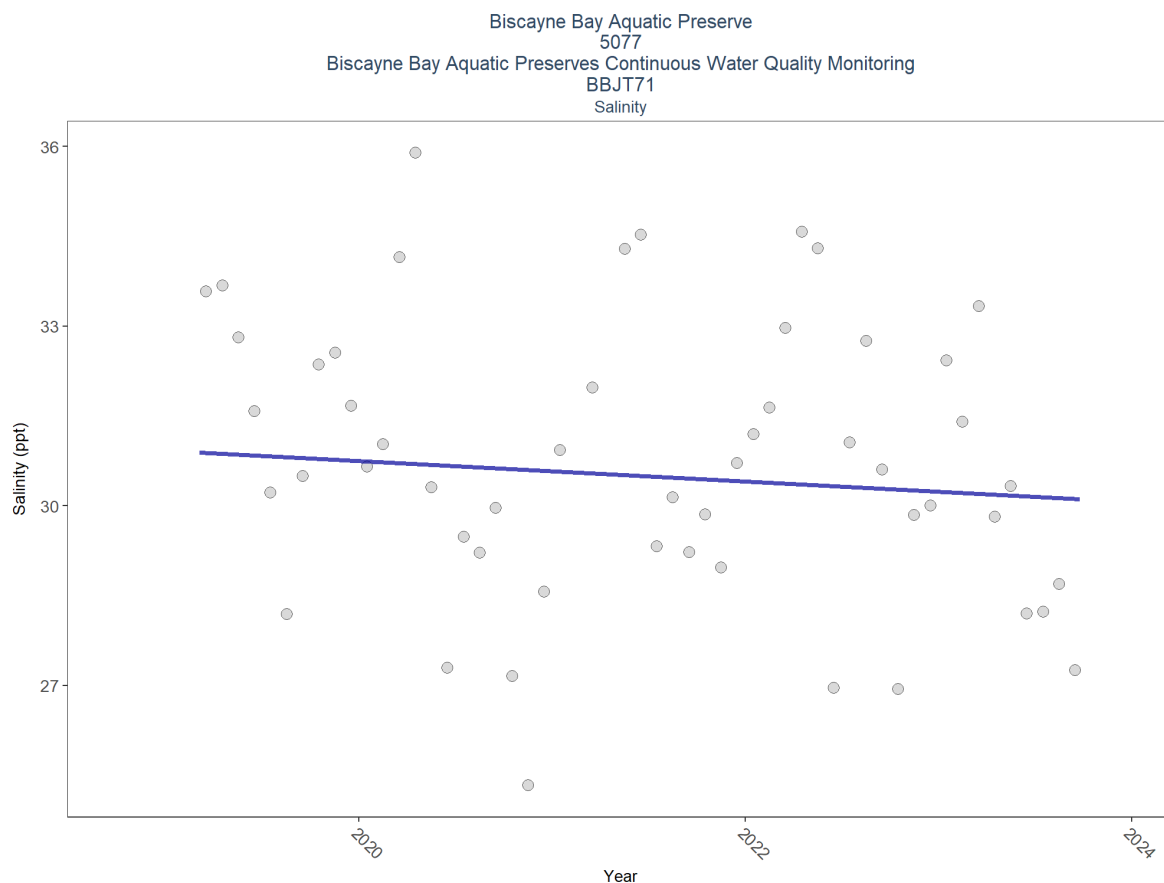


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	134713	5	15.7	TRUE	-0.0864	0.4654	-0.3707394	16.24347	11.8513	0.3749	0

p < 0.00005 appear as 0 due to rounding.

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

BBJT71

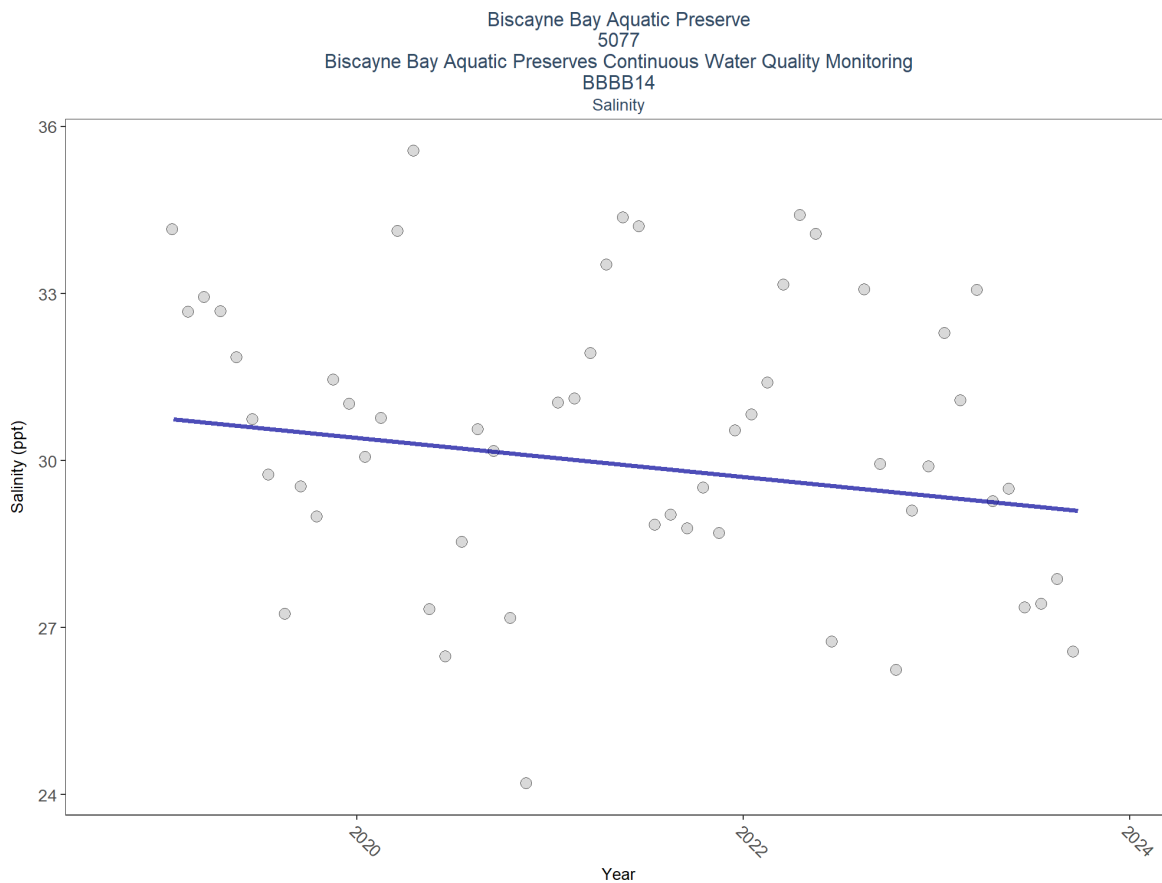


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	145764	5	31	TRUE	-0.0629	0.6207	-0.1687103	30.91398	10.5753	0.4795	0

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

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

BBBB14



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	133576	5	30.3	TRUE	-0.1818	0.2728	-0.3504266	30.7611	4.2964	0.9604	0

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

SennIntercept is intercept value at beginning of record for monitoring location

All Stations Combined

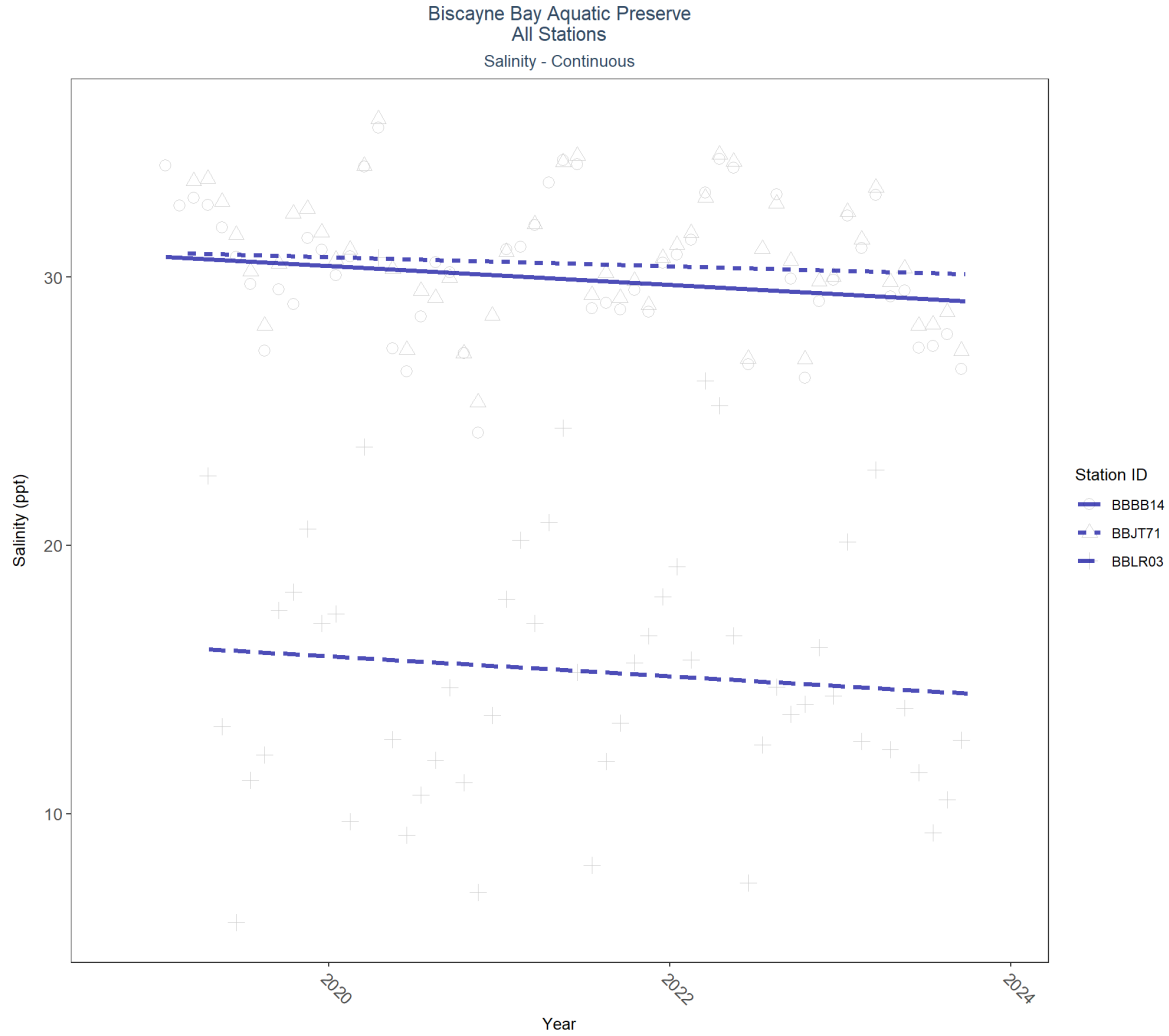
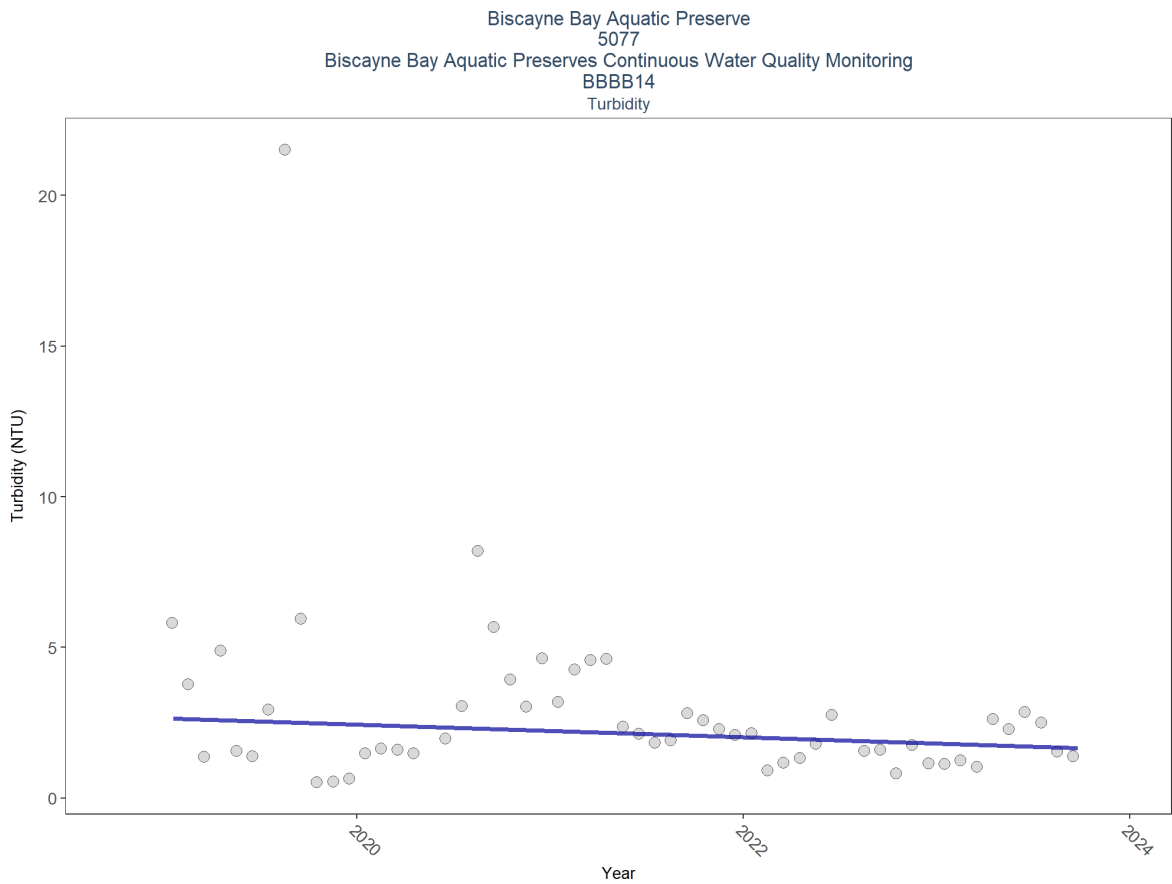


Table 4: Seasonal Kendall-Tau Results for All Stations - Salinity

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBLR03	134713	5	2019 - 2023	15.7	-0.09	16.24	-0.37	0.4654
BBMRDW	82270	3	2021 - 2023	11.1	-	-	-	-
BBJT71	145764	5	2019 - 2023	31.0	-0.06	30.91	-0.17	0.6207
BBCWA4	52024	2	2022 - 2023	33.7	-	-	-	-
BBBB14	133576	5	2019 - 2023	30.3	-0.18	30.76	-0.35	0.2728
BBMRRB	59430	2	2022 - 2023	33.1	-	-	-	-

Turbidity

BBBB14

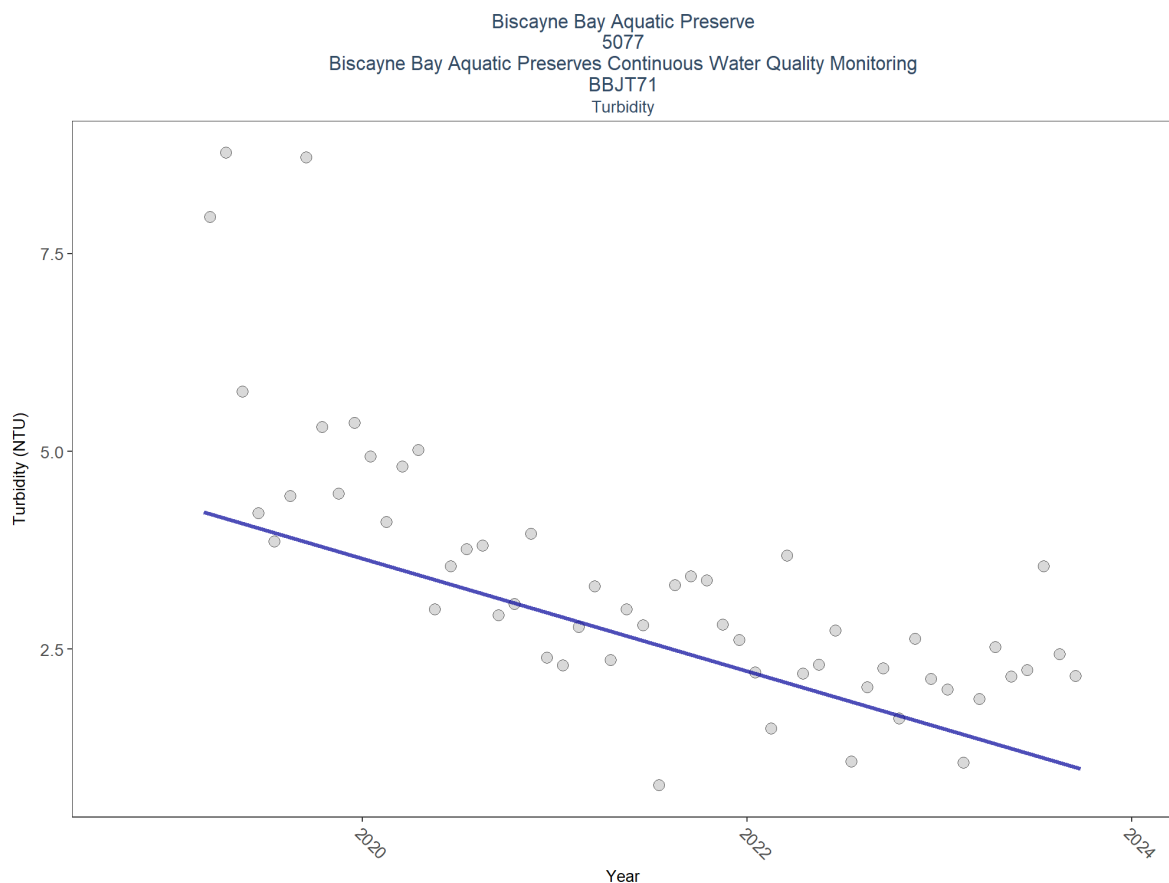


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	135830	5	2	TRUE	-0.2545	0.0328	-0.2083619	2.641393	20.0431	0.0448	-2

p < 0.00005 appear as 0 due to rounding.

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

BBJT71

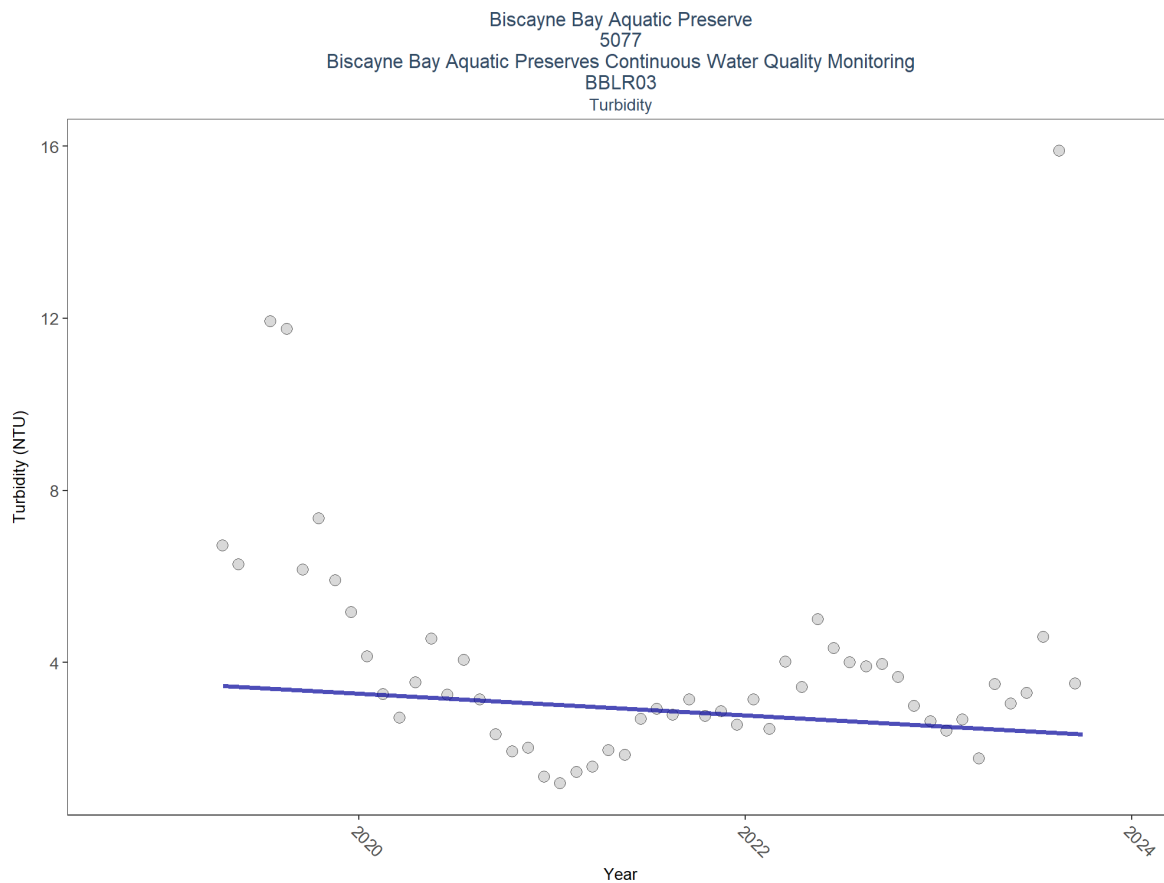


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	153730	5	3	TRUE	-0.7879	0.0000	-0.711822	4.355578	1.865	0.9989	-2

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

SennIntercept is intercept value at beginning of record for monitoring location

BBLR03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	135373	5	3	TRUE	-0.0755	0.5597	-0.2545843	3.536948	3.0031	0.9907	0

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

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

All Stations Combined

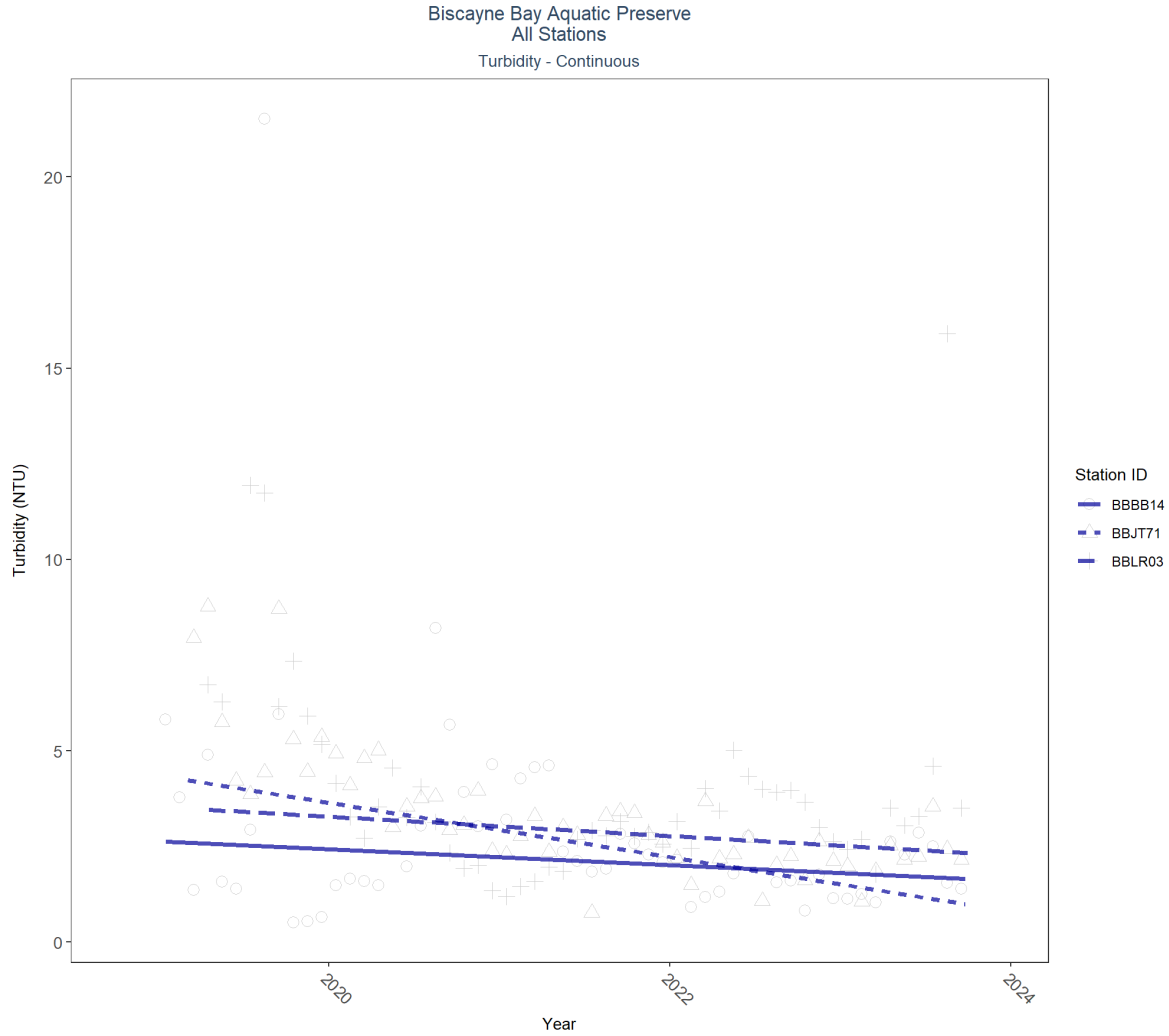
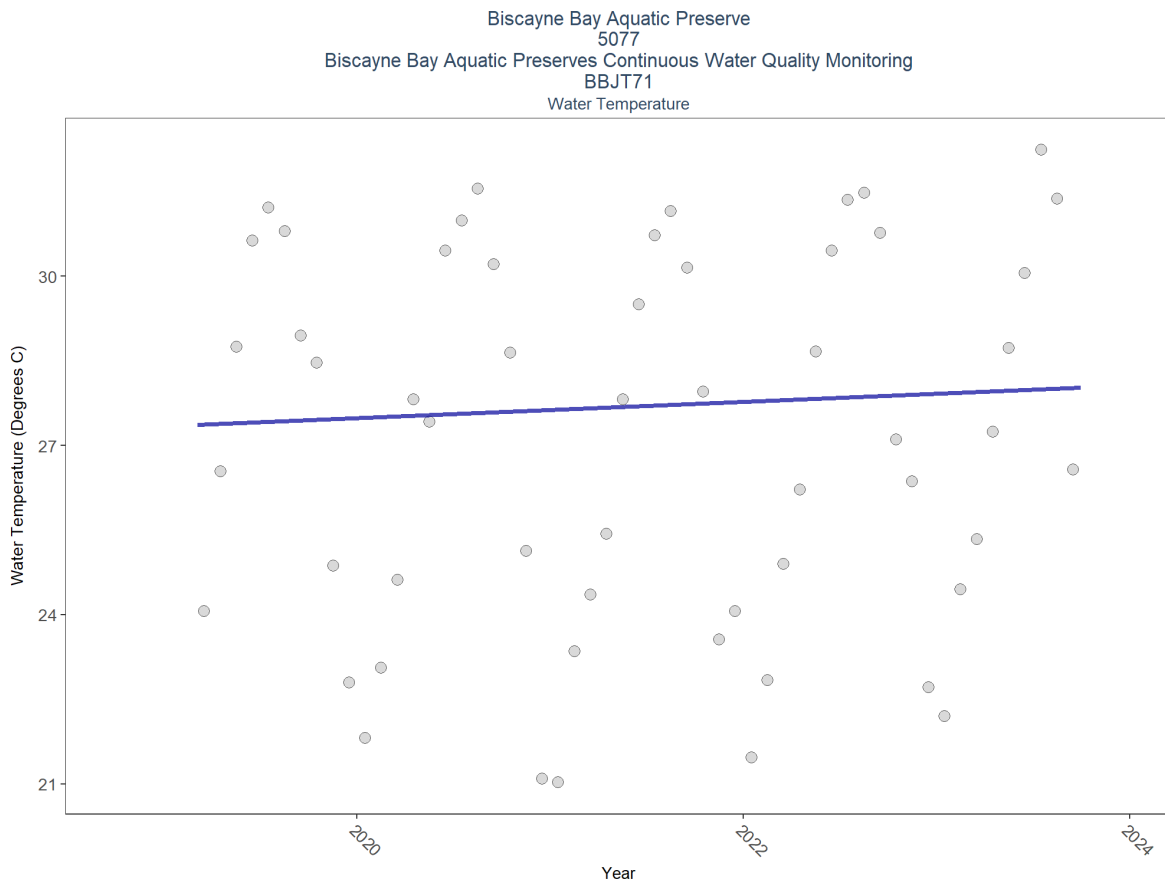


Table 5: Seasonal Kendall-Tau Results for All Stations - Turbidity

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBBB14	135830	5	2019 - 2023	2	-0.25	2.64	-0.21	0.0328
BBMRDW	83887	3	2021 - 2023	2	-	-	-	-
BBMRRB	58662	2	2022 - 2023	3	-	-	-	-
BBJT71	153730	5	2019 - 2023	3	-0.79	4.36	-0.71	0.0000
BBCWA4	55231	2	2022 - 2023	2	-	-	-	-
BBLR03	135373	5	2019 - 2023	3	-0.08	3.54	-0.25	0.5597

Water Temperature

BBJT71

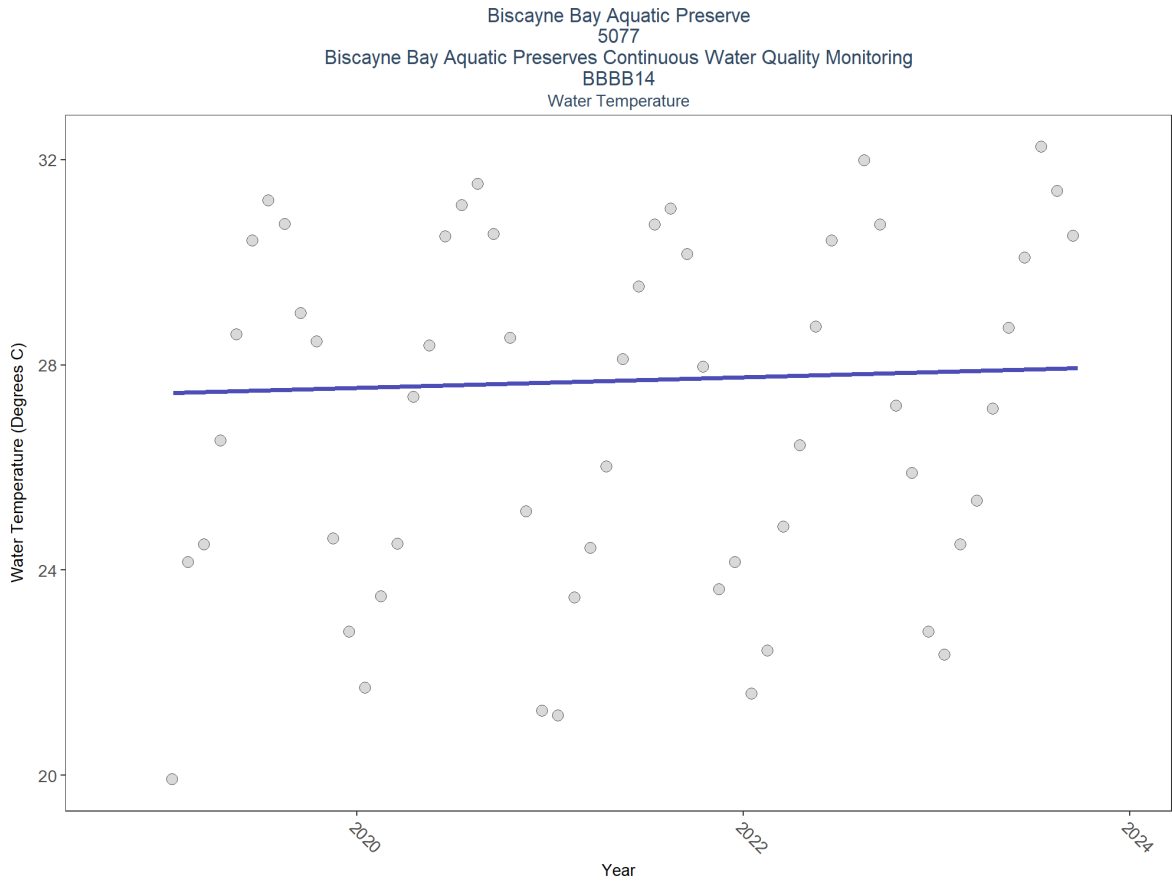


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	160039	5	27.7	TRUE	0.1152	0.3845	0.1451436	27.34282	9.855	0.5435	0

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

SennIntercept is intercept value at beginning of
record for monitoring location

BBBB14

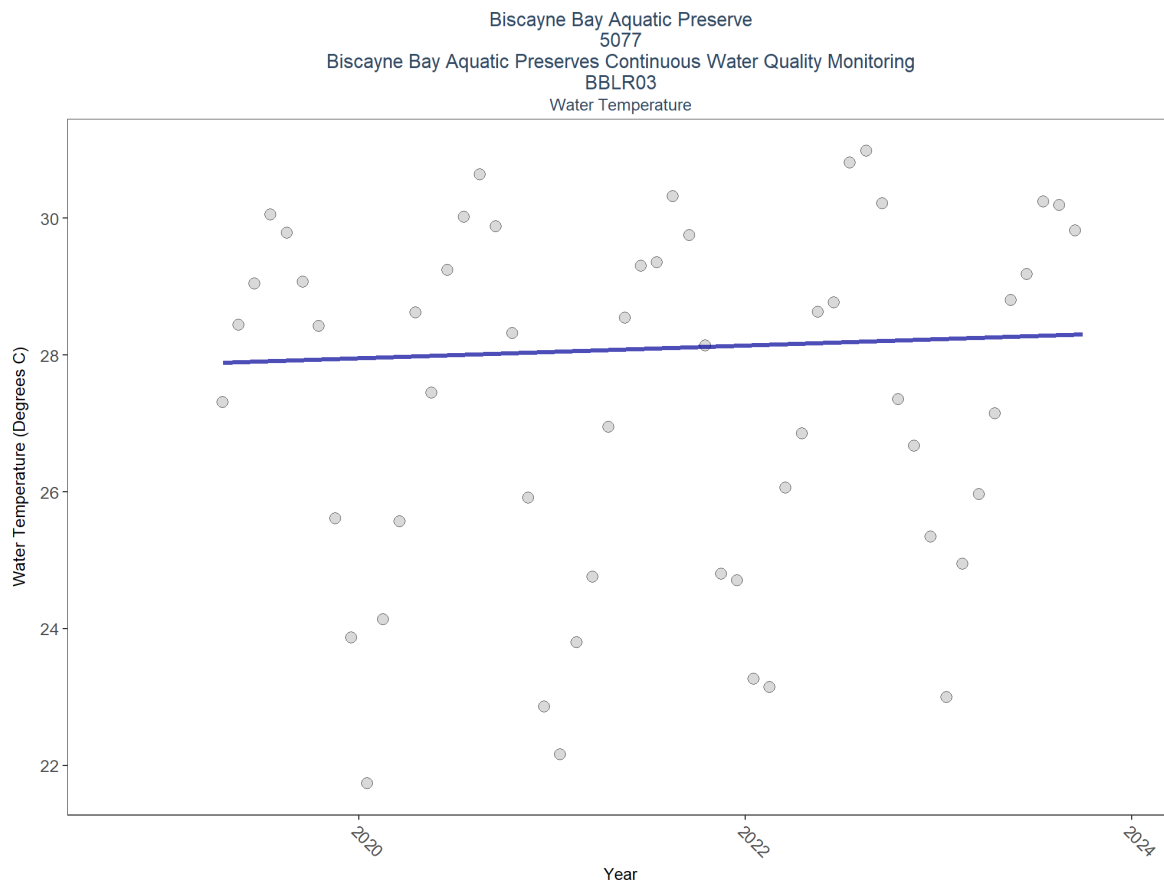


RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	144074	5	27.5	TRUE	0.1607	0.1897	0.1025806	27.45353	8.1092	0.7035	0

p < 0.00005 appear as 0 due to rounding.

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

BBLR03



RelativeDepth	N_Data	N_Years	Median	Independent	tau	p	SennSlope	SennIntercept	ChiSquared	pChiSquared	Trend
bottom	139156	5	28	TRUE	0.1852	0.1679	0.0932129	27.85779	12.9446	0.297	0

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

SennIntercept is intercept value at beginning of
record for monitoring location

All Stations Combined

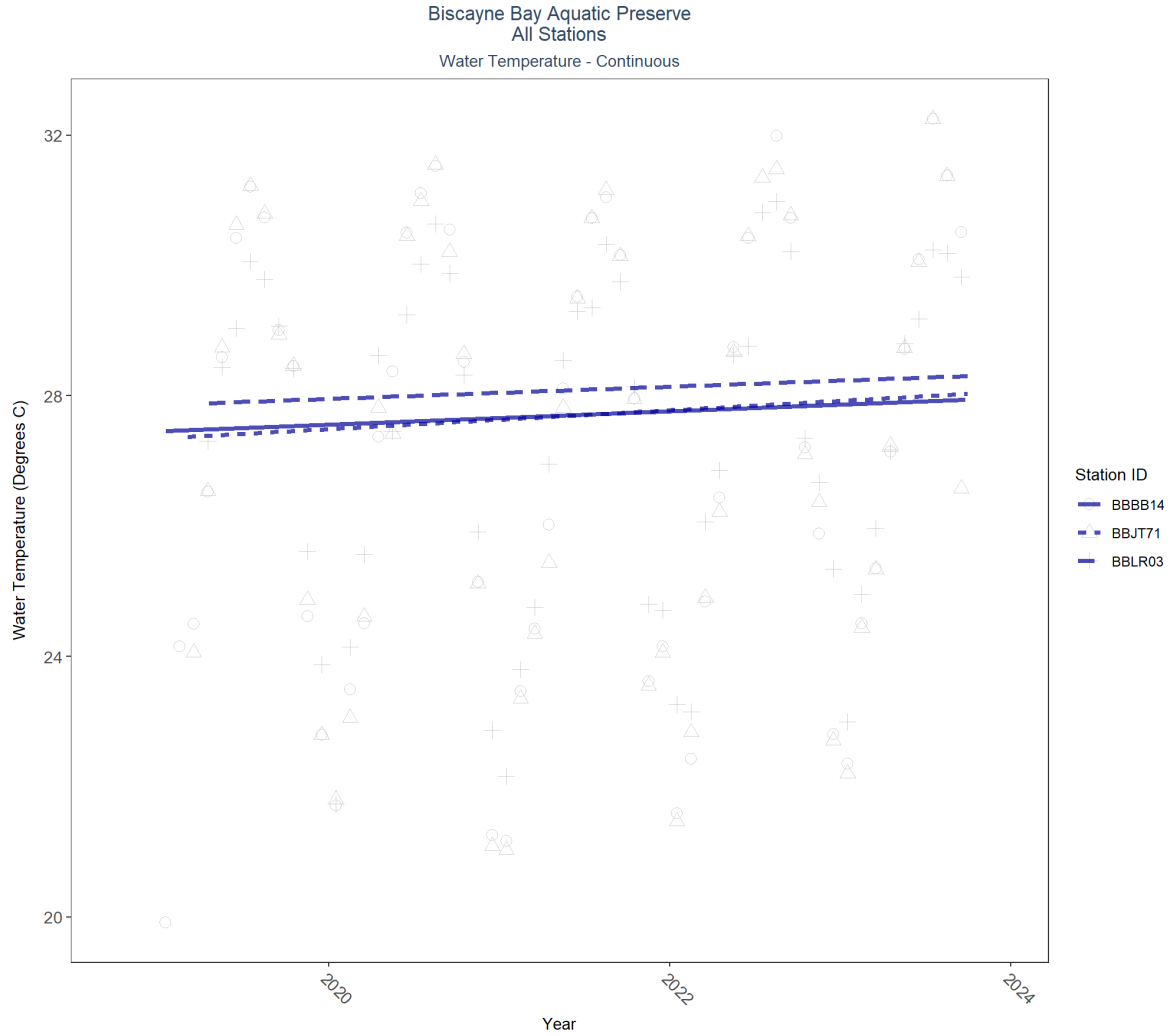


Table 6: Seasonal Kendall-Tau Results for All Stations - Water Temperature

Station	N_Data	N_Years	Period of Record	Median	tau	SennIntercept	SennSlope	p
BBJT71	160039	5	2019 - 2023	27.7	0.12	27.34	0.15	0.3845
BBBB14	144074	5	2019 - 2023	27.5	0.16	27.45	0.1	0.1897
BBLR03	139156	5	2019 - 2023	28.0	0.19	27.86	0.09	0.1679
BBMRDW	84153	3	2021 - 2023	27.9	-	-	-	-
BBCWA4	57815	2	2022 - 2023	27.6	-	-	-	-
BBMRRB	59474	2	2022 - 2023	27.7	-	-	-	-