

Final California 2010 Integrated Report(303(d) List/305(b) Report)

Supporting Information

Regional Board 1 - North Coast Region

Water Body Name: Trinity River HU, Lower Trinity HA
Water Body ID: CAR1061103419990607150231
Water Body Type: River & Stream

DECISION ID 12320

Region 1

Trinity River HU, Lower Trinity HA

Pollutant: Aluminum
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.1 of the Listing Policy. Under Section 3.1, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 25 aluminum samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 25 samples exceeded the aluminum objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision: After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 12320, Aluminum

Region 1

Trinity River HU, Lower Trinity HA

LOE ID: 25392

Pollutant: Aluminum
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 25
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of the 25 aluminum samples collected from the Trinity River exceed the objective. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the SWAMP Summary Report for the North Coast Region for Years 2000-2006 (NCRWQCB 2008).

Data Reference: [Surface Water Ambient Monitoring Program \(SWAMP\). Summary Report for the North Coast Region \(RWQCB-1\) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008](#)

Water Quality Objective/Criterion: Per the Basin Plan (NCRWQCB 2007): The Maximum Contaminant Level for aluminum is 1.0 mg/l (1,000 ug/L).

Objective/Criterion Reference: [Water Quality Control Plan \(Basin Plan\) - North Coast Region \(Region 1\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID TRINWP). Samples were collected from well-mixed flows in glides or riffles.

Temporal Representation: At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (Puckett 2002).

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 15732
Trinity River HU, Lower Trinity HA

Region 1

Pollutant: Ammonia as Nitrogen
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.1 of the Listing Policy. Under Section 3.1, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 28 ammonia as nitrogen samples exceed the objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the Section 303(d) List in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 28 samples exceed

the water quality objective, and this does not exceed the allowable frequency listed in Table 3.1 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision:

After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision:

After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 15732, Ammonia as Nitrogen

Region 1

Trinity River HU, Lower Trinity HA

LOE ID:	26303
Pollutant:	Ammonia as Nitrogen
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Total
Beneficial Use:	Cold Freshwater Habitat
Aquatic Life Use:	Fish Migration Fish Spawning Freshwater Replenishment Preservation of Rare & Endangered Species Wildlife Habitat
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 28 ammonia as nitrogen samples collected from the Trinity River exceed the objective. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the SWAMP Summary Report for the North Coast Region for Years 2000-2006 (NCRWQCB 2008).
Data Reference:	Surface Water Ambient Monitoring Program (SWAMP). Summary Report for the North Coast Region (RWQCB-1) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008
Water Quality Objective/Criterion:	Per the Basin Plan (NCRWQCB 2007): All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - North Coast Region (Region 1)
Evaluation Guideline:	Per the National Recommended Water Quality Criteria (USEPA 2006): The 1-hour average concentration (acute criterion or CMC) of total ammonia nitrogen (in mg N/L) for freshwater where salmonid fish are present, which is not to be exceeded more than once every three years on average, is calculated using the following equation: $CMC = 0.275 / (1 + 10^{(7.204 - pH)}) + 39.0 / (1 + 10^{(pH - 7.204)})$.
Guideline Reference:	National Recommended Water Quality Criteria. United States Environmental Protection Agency. Office of Water. Office of Science and Technology. 4304T The Blue Book
Spatial Representation:	Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID 106TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID

106TRINWP). Samples were collected from well-mixed flows in glides or riffles.

Temporal Representation: At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (Puckett 2002).

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 10642 **Region 1**

Trinity River HU, Lower Trinity HA

Pollutant: **Arsenic | Cadmium | Chromium (total) | Copper | Lead | Mercury | Nickel | Selenium | Silver | Zinc**

Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**

Last Listing Cycle's Final Listing Decision: New Decision

Revision Status Revised

Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.1 of the Listing Policy. Under Section 3.1, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 249 metals samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 249 samples exceeded the metal objectives, and this does not exceed the allowable frequency of 22 per the binomial distribution described in Section 3.1 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision: After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 10642, Multiple Pollutants **Region 1**

Trinity River HU, Lower Trinity HA

LOE ID: 21515

Pollutant:

LOE Subgroup:	Arsenic Cadmium Chromium (total) Copper Lead Mercury Nickel Selenium Silver Zinc
Matrix:	Pollutant-Water
Fraction:	Water
	Total
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	249
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 249 metals samples collected in the mainstem Trinity River exceed the objectives. For each of the 10 metal parameters, there were 9-10 samples for each collected at the Hoopa site and 15 samples for each collected at the Weitchpec site. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the SWAMP Summary Report for the North Coast Region for Years 2000-2006 (NCRWQCB 2008).
Data Reference:	Surface Water Ambient Monitoring Program (SWAMP). Summary Report for the North Coast Region (RWQCB-1) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008
Water Quality Objective/Criterion:	Per the Basin Plan (NCRWQCB 2007): Arsenic objective is 0.05 mg/L. Cadmium objective is 0.01 mg/L. Chromium objective is 0.05 mg/L. Lead objective is 0.05 mg/L. Mercury objective is 0.002 mg/L. Selenium objective is 0.01 mg/L. Silver objective is 0.05 mg/L. Per 22 CCR 64431: Nickel maximum contaminant level is 0.1 mg/L. Per 22 CCR 64449: Copper secondary maximum contaminant level is 1.0 mg/L. Zinc secondary maximum contaminant level is 5.0 mg/L.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - North Coast Region (Region 1) Title 22, Division 4, Chapter 15, Sections 64400 et seq. California Code of Regulations
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID 106TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID 106TRINWP). Samples were collected from well-mixed flows in glides or riffles.
Temporal Representation:	At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.
Environmental Conditions:	There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.
QAPP Information:	Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (SWAMP 2002).
QAPP Information Reference(s):	Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 (1st version)

DECISION ID **12441**
Trinity River HU, Lower Trinity HA

Region 1

Pollutant: **Chloride**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
New Decision

Last Listing Cycle's Final Listing Decision:

Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.2 of the Listing Policy. Under Section 3.2, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 28 chloride samples exceed the evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 28 samples exceeded the chloride evaluation guideline used to interpret the water quality objective, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision: After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

**Line of Evidence (LOE) for Decision ID 12441, Chloride
 Trinity River HU, Lower Trinity HA**

Region 1

LOE ID:	25419
Pollutant:	Chloride
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 28 chloride samples collected in the mainstem Trinity River exceed the evaluation guideline. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the SWAMP Summary Report for the North Coast Region for Years 2000-2006 (NCRWQCB 2008).
Data Reference:	Surface Water Ambient Monitoring Program (SWAMP). Summary Report for the North Coast Region (RWQCB-1) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008
Water Quality Objective/Criterion:	Per the Basin Plan (NCRWQCB 2007): Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or

Objective/Criterion Reference: odors to fish flesh or other edible products of aquatic origin, or that cause nuisance or adversely affect beneficial uses.
[Water Quality Control Plan \(Basin Plan\) - North Coast Region \(Region 1\)](#)

Evaluation Guideline: Per 22 CCR 64449: The recommended Secondary Maximum Contaminant Level for chloride is 250 mg/L.

Guideline Reference: [Title 22, Division 4, Chapter 15, Sections 64400 et seq. California Code of Regulations](#)

Spatial Representation: Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID 106TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID 106TRINWP). Samples were collected from well-mixed flows in glides or riffles.

Temporal Representation: At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (SWAMP 2002).

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 13975 **Region 1**
Trinity River HU, Lower Trinity HA

Pollutant: **Cyanobacteria hepatotoxic microcystins**
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.11 of the Listing Policy. One line of evidence is available in the administrative record to assess this pollutant.

Microcystins are a class of toxic chemicals produced by some strains of the cyanobacteria *Microcystis aeruginosa* that are released into waters when cyanobacterial cells die or cell membranes degrade. These chemicals are a human health risk, capable of inducing skin rashes, sore throat, oral blistering, nausea, gastroenteritis, fever, and liver toxicity (WHO 1999). Routes of exposure for human health include dermal contact, ingestion of water, and ingestion of tissue (fish or shellfish). For animals, exposures of concern include ingestion of water and tissue.

Based on the readily available data and information, the situation-specific weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the Section 303(d) List in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that:

- (1) None of the 6 water column microcystin toxin samples exceed the evaluation guideline used to interpret the water quality objective.
- (2) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy.
- (3) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy.
- (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision: After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 13975, Cyanobacteria hepatotoxic microcystins

Region 1

Trinity River HU, Lower Trinity HA

LOE ID: 26041

Pollutant: Cyanobacteria hepatotoxic microcystins
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: None

Beneficial Use: Water Contact Recreation

Number of Samples: 6
 Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
 Data Used to Assess Water Quality: None of the 6 samples analyzed for Microcystis cells collected in the mainstem Trinity River exceed the evaluation guideline. Microcystis cell concentrations were all 0 cells/ml. Samples were collected by the Yurok Tribal Environmental Program. Data are summarized in the "Final 2007 Klamath River Blue-Green Algae Summary Report" (Fetcho 2008).

Data Reference: [Final 2007 Klamath River Blue-Green Algae Summary Report. Yurok Tribe Environmental Program](#)

Water Quality Objective/Criterion: Per the Basin Plan (NCRWQCB 2007): All water shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.

Objective/Criterion Reference: [Water Quality Control Plan \(Basin Plan\) - North Coast Region \(Region 1\)](#)

Evaluation Guideline: Per the Blue Green Algae Work Group (2008): The guideline for Microcystis cells is 40,000 cells/ml if cell populations are dominated by Microcystis and Planktothrix to protect the recreational exposure of a child. This cell count evaluation guideline is a strong indicator of potential toxicity associated with the toxin microcystin.

Guideline Reference: [Cyanobacteria in California Recreational Water Bodies. Providing Voluntary Guidance about Harmful Algal Blooms, Their Monitoring, and Public Notification. Draft. September 2008. Blue Green Algae Work Group of the State Water Resources Control Board, Department of Public Health, and Office of Environmental Health and Hazard Assessment](#)

Spatial Representation: Samples were collected in the mainstem Trinity River above the confluence with the Klamath River at river mile 0.5 (Site TR).

Temporal Representation: Grab samples were collected in the Trinity River on 6 occasions between May 30, 2007 and October 15, 2007.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Samples were collected and analyzed according to the procedures described in the "Lower Klamath River Nutrient, Periphyton, Phytoplankton and Algal Toxin Sampling Analysis Plan (SAP)" (Yurok 2008) and the "Final 2007 Klamath River Blue-Green Algae Summary Report" (Fetcho 2008).

QAPP Information Reference(s): [Lower Klamath River Nutrient, Periphyton, Phytoplankton, and Algal Toxin Sampling Analysis Plan \(SAP\). June 2008. Prepared with assistance from Kier Associates](#)
[Final 2007 Klamath River Blue-Green Algae Summary Report. Yurok Tribe Environmental Program](#)

DECISION ID 10022 **Region 1**
Trinity River HU, Lower Trinity HA

Pollutant: Specific Conductivity
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) list under Section 3.2 of the Listing Policy. Under Section 3.2 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 29 specific conductivity samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 29 samples exceed the specific conductivity objective, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision: After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 10022, Specific Conductivity **Region 1**
Trinity River HU, Lower Trinity HA

LOE ID: 21229
Pollutant: Specific Conductivity
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 29
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: None of the 29 specific conductivity samples collected from the Trinity River exceed the objective. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the SWAMP Summary Report for the North Coast Region for Years 2000-2006 (NCRWQCB 2008).

Data Reference: [Surface Water Ambient Monitoring Program \(SWAMP\). Summary Report for the North Coast Region \(RWQCB-1\) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008](#)

Water Quality Objective/Criterion: Per the Basin Plan (NCRWQCB 2007): The 90% upper limit specific conductance objective at 77 F is 275 micromhos (or mS/cm²). The 50% upper limit specific conductance objective at 77 F is 200 micromhos (or mS/cm²). The 90% and 50% upper limits represent the 90/50 percentile values for a calendar year. 90% or 50% or more of the values must be less than or equal to the upper limit.

Objective/Criterion Reference: [Water Quality Control Plan \(Basin Plan\) - North Coast Region \(Region 1\)](#)

Evaluation Guideline:
Guideline Reference:

Spatial Representation: Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID TRINWP). Samples were collected from well-mixed flows in glides or riffles.

Temporal Representation: At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (Puckett 2002).

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 12511

Region 1

Trinity River HU, Lower Trinity HA

Pollutant: Sulfates
Final Listing Decision: Do Not List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: New Decision
Revision Status: Revised
Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for placement on the Section 303(d) List under Section 3.2 of the Listing Policy. Under Section 3.2, a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the 28 sulfate samples exceed the evaluation guideline. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this

water segment-pollutant combination on the Section 303(d) List in the Water Quality Limited Segments category (i.e., sufficient justification to not list). This conclusion is based on the staff findings that: (1) The data used satisfies the data quality requirements of Section 6.1.4 of the Policy. (2) The data used satisfies the data quantity requirements of Section 6.1.5 of the Policy. (3) None of the 28 samples exceed the sulfate evaluation guideline used to interpret the water quality objective, and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. (4) Pursuant to Section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

RWQCB Board Staff Decision:

After review of the available data and information, North Coast Regional Water Board staff concludes that the water body-pollutant combination should not be placed on the Section 303(d) List because applicable water quality standards are being attained.

SWRCB Board Staff Decision:

After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

**Line of Evidence (LOE) for Decision ID 12511, Sulfates
Trinity River HU, Lower Trinity HA**

Region 1

LOE ID:	25528
Pollutant:	Sulfates
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	Not Recorded
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	28
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 28 sulfate samples collected in the mainstem Trinity River exceed the evaluation guideline. The samples were collected as part of the Surface Water Ambient Water Monitoring Program (SWAMP). The data are found in the 5-Year Monitoring Report (NCRWQCB 2008).
Data Reference:	Surface Water Ambient Monitoring Program (SWAMP). Summary Report for the North Coast Region (RWQCB-1) for years 2000-2006. North Coast Regional Water Quality Control Board. March 2008
Water Quality Objective/Criterion:	Per the Basin Plan (NCRWQCB 2007, p. 3-3.00): Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	Water Quality Control Plan (Basin Plan) - North Coast Region (Region 1)
Evaluation Guideline:	Per 22 CCR 64449 (Table 64449-B): The recommended secondary maximum contaminant level for sulfate is 250 mg/L.
Guideline Reference:	Title 22, Division 4, Chapter 15, Sections 64400 et seq. California Code of Regulations
Spatial Representation:	Samples were collected from the mainstem Trinity River at 2 locations as follows: (1) at Hoopa (SWAMP Station ID 106TRINHP), and (2) at Weitchpec above the confluence with the Klamath River (SWAMP Station ID 106TRINWP). Samples were collected from well-mixed flows in glides or riffles.

Temporal Representation: At the Hoopa site, samples were collected from February 2002 to June 2003. At the Weitchpec site, samples were collected from March 2001 to June 2005. Site visits corresponded to fall, winter, spring and early summer seasonal conditions.

Environmental Conditions: There are no known environmental conditions (e.g., seasonality, land use practices, fire events, storms, etc.) that are related to these data.

QAPP Information: Quality control was conducted in accordance with the SWAMP Quality Assurance Management Plan (SWAMP 2002).

QAPP Information Reference(s): [Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. Sacramento, CA. State Water Resources Control Board. SWAMP. December 2002 \(1st version\)](#)

DECISION ID 6924 Region 1

Trinity River HU, Lower Trinity HA

Pollutant: Sedimentation/Siltation

Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)

Last Listing Cycle's Final Listing Decision: List on 303(d) list (being addressed by USEPA approved TMDL)(2006)

Revision Status: Original

Sources: Channel Erosion | Dam Construction | Drainage/Filling Of Wetlands | Erosion/Siltation | Flow Regulation/Modification | Habitat Modification | Harvesting, Restoration, Residue Management | Hydromodification | Logging Road Construction/Maintenance | Mine Tailings | Natural Sources | Removal of Riparian Vegetation | Resource Extraction | Silvicultural Point Sources | Silviculture | Streambank Modification/Destabilization | Surface Mining | Upstream Impoundment

TMDL Name: Trinity River Sediment

TMDL Project Code: 505

Date TMDL Approved by USEPA: 12/20/2001

Impairment from Pollutant or Pollution: Pollutant

Conclusion: This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status.

US EPA was the lead agency for development of the technical TMDL for the Trinity River TMDL. US EPA established the Trinity River Technical TMDL for Sediment on December 20, 2001.

Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.

RWQCB Board Staff Decision: This is a decision made by the State Water Resources Control Board and approved by the USEPA in 2006 . No new data were assessed by the Regional Board for 2008. The decision has not changed.

SWRCB Board Staff Decision: After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

USEPA Action (if applicable):

Line of Evidence (LOE) for Decision ID 6924, Sedimentation/Siltation
Trinity River HU, Lower Trinity HA

Region 1

LOE ID: 1669

Pollutant: Sedimentation/Siltation
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Cold Freshwater Habitat

Number of Samples: 0
Number of Exceedances: 0

Data and Information Type: Not Specified
Data Used to Assess Water Quality: Unspecified?This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.

Data Reference: [Placeholder reference 2006 303\(d\)](#)

Water Quality Objective/Criterion:
Objective/Criterion Reference:

Evaluation Guideline:
Guideline Reference:

Spatial Representation:
Temporal Representation:
Environmental Conditions:
QAPP Information: QA Info Missing
QAPP Information Reference(s):