

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

Supporting Information

Regional Board 5 - Central Valley Region

Water Body Name: [Spring Creek, Lower \(Iron Mountain Mine to Keswick Reservoir\)](#)
Water Body ID: CAR5244001019980818103919
Water Body Type: River & Stream

DECISION ID 10320

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Chloride
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 listing under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Data is available from 1 line of evidence for this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification for placing this water segment-pollution combination on the section 303(d) list. The recommendation is based on staff findings that 0 of 1 available concentrations exceeded the water quality objective and this does not exceed the allowable frequency using Table 3.1 of the Listing Policy. Table 3.1 of the listing policy recommends listing if a minimum sample size of 2 has 2 or more samples that exceed the evaluation criteria.

The data used satisfies the data quality requirements of section 6.1.4 of the Policy. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 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, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

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 10320, Chloride

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

LOE ID: 20243

Pollutant: Chloride
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: None

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: Zero of the 1 sample collected by the Surface Water Ambient Monitoring Program exceeded the evaluation objective for Chloride.

Data Reference: [SWAMP data entered by SWRCB into BDAT database](#)

Water Quality Objective/Criterion: All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. (CRWQCB, 2006)

Objective/Criterion Reference: [Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Sacramento and San Joaquin River Basins. 4th ed](#)

Evaluation Guideline: Chloride levels should not exceed 250 mg/L (Department of Public Health Secondary MCL).

Guideline Reference: [California Code of Regulations, Title 22, Division 4, Chapter 15. Domestic Water Quality and Monitoring.](#)
<http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx>

Spatial Representation: The sample was collected at Spring Cr @ Spring Cr Rd bridge.
Temporal Representation: The sample was collected on September 15 2003.
Environmental Conditions:
QAPP Information: Monitoring was conducted in accordance with the State Water Resources Control Board's Quality Assurance Program Plan for the State of California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

DECISION ID 10388

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Escherichia coli (E. coli)
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 3.3 of the Listing Policy. Under section 3.3 a single line of evidence is necessary to assess listing status.

One line of evidence are available in the administrative record to assess this pollutant. One of the 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.

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. One of 16 available concentrations exceeded the USEPA E. coli Objective for Water Contact Recreation and this does not exceed the allowable frequency using Table 3.2

of the Listing Policy. In addition, 0 of 16 available concentrations exceeded the USEPA E. coli Objective for Non-Contact Recreation and this does not exceed the allowable frequency using 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, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

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 10388, Escherichia coli (E. coli)
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)**

Region 5

LOE ID:	21038
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Water Contact Recreation
Number of Samples:	16
Number of Exceedances:	1
Data and Information Type:	PATHOGEN MONITORING
Data Used to Assess Water Quality:	1 of the 16 samples collected by the Surface Water Ambient Monitoring Program exceeded the evaluation objective for E.Coli Bacteria. The exceeded results are as follows: 7/20/2004 - a sample taken at Spring Cr @ Spring Cr Rd bridge had a result of 261MPN/100 mL.
Data Reference:	SWAMP data entered by SWRCB into BDAT database
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. (CRWQCB, 2006)
Objective/Criterion Reference:	Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Sacramento and San Joaquin River Basins. 4th ed
Evaluation Guideline:	E.Coli Bacteria levels should not exceed 235 MPN/100 mL in any single sample (USEPA E.Coli objective)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at Spring Cr @ Spring Cr Rd bridge.
Temporal Representation:	The samples were collected from Sep 15 2003 to Sep 20 2005
Environmental Conditions:	
QAPP Information:	Monitoring was conducted in accordance with the State Water Resources Control Board's Quality Assurance Program Plan for the State of California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

**Line of Evidence (LOE) for Decision ID 10388, Escherichia coli (E. coli)
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)**

Region 5

LOE ID:	20266
Pollutant:	Escherichia coli (E. coli)
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Non-Contact Recreation
Number of Samples:	16
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	0 of the 16 samples collected by the Surface Water Ambient Monitoring Program exceeded the evaluation objective for E.Coli Bacteria.
Data Reference:	SWAMP data entered by SWRCB into BDAT database
Water Quality Objective/Criterion:	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. (CRWQCB, 2006)
Objective/Criterion Reference:	Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Sacramento and San Joaquin River Basins. 4th ed
Evaluation Guideline:	E.Coli Bacteria levels should not exceed 409 MPN/100 mL in any single sample (USEPA E.Coli Guideline)
Guideline Reference:	Ambient Water Quality Criteria for Bacteria - 1986. EPA440/5-84-002
Spatial Representation:	Samples were collected at Spring Cr @ Spring Cr Rd bridge.
Temporal Representation:	The samples were collected from Sep 15 2003 to Sep 20 2005
Environmental Conditions:	
QAPP Information:	Monitoring was conducted in accordance with the State Water Resources Control Board's Quality Assurance Program Plan for the State of California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 10322

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

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 listing under sections 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status. Data is available from 1 line of evidence for this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification for placing this water segment-pollution combination on the section 303(d) list. The recommendation is based on staff findings that 1 of 15 available concentrations exceeded the water quality objective and this does not exceed the allowable frequency

using Table 3.2 of the Listing Policy. Table 3.2 of the listing policy recommends listing if a sample size of 15 has 5 or more samples that exceed the evaluation criteria.

The data used satisfies the data quality requirements of section 6.1.4 of the Policy. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 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, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards are not being exceeded.

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 10322, Specific Conductivity
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)**

Region 5

LOE ID:	20297
Pollutant:	Specific Conductivity
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Municipal & Domestic Supply
Number of Samples:	15
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	None of the 15 samples collected by the Surface Water Ambient Monitoring Program exceeded the "recommended" Secondary MCL of 900 uS/cm for electrical conductivity
Data Reference:	SWAMP data entered by SWRCB into BDAT database
Water Quality Objective/Criterion:	The secondary MCLs for electrical conductivity provide a range of values including a "recommended" level (900 uS/cm), upper level (1600 uS/cm) and a short-term level (2200 uS/cm). The "recommended" concentration was used as it is intended to be protective of all drinking water uses
Objective/Criterion Reference:	California Code of Regulations, Title 22, Division 4, Chapter 15. Domestic Water Quality and Monitoring. http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Samples were collected from Spring Creek at Spring Creek Road bridge
Temporal Representation:	The samples were collected between October 21, 2003 and February 23, 2005
Environmental Conditions:	
QAPP Information:	Monitoring was conducted in accordance with the State Water Resources Control Board's Quality Assurance Program Plan for the State of California's Surface Water Ambient Monitoring Program.
QAPP Information Reference(s):	

DECISION ID 10323
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Region 5

Pollutant: Total Dissolved Solids
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 listing under sections 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status. Data is available from 1 line of evidence for this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification for placing this water segment-pollution combination on the section 303(d) list. The recommendation is based on staff findings that 0 of 1 available concentrations exceeded the water quality objective and this does not exceed the allowable frequency using Table 3.1 of the Listing Policy. Table 3.1 of the listing policy recommends listing if a minimum sample size of 2 has 2 or more samples that exceed the evaluation criteria.

The data used satisfies the data quality requirements of section 6.1.4 of the Policy. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 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, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

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 10323, Total Dissolved Solids
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)**

Region 5

LOE ID: 20337

Pollutant: Total Dissolved Solids
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Total

Beneficial Use: Municipal & Domestic Supply

Number of Samples: 1
Number of Exceedances: 0

Data and Information Type: PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality: The sample collected by the Surface Water Ambient Monitoring Program did not exceed the "recommended" Secondary MCL of 500 mg/L for Total Dissolved Solids

Data Reference: [SWAMP data entered by SWRCB into BDAT database](#)

Water Quality Objective/Criterion:

Objective/Criterion Reference: The secondary MCL's for Total Dissolved Solids provide a range of values including a recommended level (500 mg/L), upper level (1000 mg/L) and a short-term level (1500 mg/L). The "recommended" concentration was used as it is intended to be protective of all drinking water uses
[California Code of Regulations, Title 22, Division 4, Chapter 15. Domestic Water Quality and Monitoring.](http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx)
<http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Lawbook.aspx>

Evaluation Guideline:
 Guideline Reference:

Spatial Representation: The sample was collected from Spring Creek at Spring Creek Road bridge
 Temporal Representation: The sample was collected on September 15, 2003

Environmental Conditions:
 QAPP Information: Monitoring was conducted in accordance with the State Water Resources Control Board's Quality Assurance Program Plan for the State of California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s):

DECISION ID 7508 **Region 5**
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Acid Mine Drainage
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2006)
Revision Status: Original
Sources: Resource Extraction
Expected TMDL: 2020
Completion Date:
Impairment from Pollutant or Pollution: Pollutant

Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

RWQCB Board Staff Decision: No new data were assessed 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): USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

Line of Evidence (LOE) for Decision ID 7508, Acid Mine Drainage **Region 5**
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

LOE ID: 4558
 Pollutant: Acid Mine Drainage
 LOE Subgroup: Pollutant-Water
 Matrix: Water
 Fraction: Not Recorded
 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 pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID 7509 **Region 5**
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Cadmium
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2006)
Revision Status Original
Sources: Resource Extraction
Expected TMDL 2020
Completion Date:
Impairment from Pollutant or Pollution: Pollutant

Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

RWQCB Board Staff Decision: No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

SWRCB 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.

USEPA Action (if applicable): USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

Line of Evidence (LOE) for Decision ID 7509, Cadmium **Region 5**
Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

LOE ID: 4559

Pollutant: Cadmium
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

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 pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID 7510

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Copper
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2006)
Revision Status: Original
Sources: Resource Extraction
Expected TMDL: 2020
Completion Date:
Impairment from Pollutant or Pollution: Pollutant

Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

RWQCB Board Staff Decision: No new data were assessed 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): USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

Line of Evidence (LOE) for Decision ID 7510, Copper

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

LOE ID: 4560

Pollutant: Copper
LOE Subgroup: Pollutant-Water
Matrix: Water
Fraction: Not Recorded

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 pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified
Temporal Representation: Unspecified
Environmental Conditions: Unspecified
QAPP Information: Unspecified
QAPP Information Reference(s):

DECISION ID 7511

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

Pollutant: Zinc
Final Listing Decision: List on 303(d) list (TMDL required list)
Last Listing Cycle's Final Listing Decision: List on 303(d) list (TMDL required list)(2006)
Revision Status: Original
Sources: Resource Extraction
Expected TMDL Completion Date: 2020
Impairment from Pollutant or Pollution: Pollutant

Conclusion: 303(d) listing decisions made prior to 2006 were not held in an assessment database. The Regional Boards will update this decision when new data and information become available and are assessed.

RWQCB Board Staff Decision: No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

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): USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

Line of Evidence (LOE) for Decision ID 7511, Zinc

Region 5

Spring Creek, Lower (Iron Mountain Mine to Keswick Reservoir)

LOE ID: 4561
Pollutant: Zinc
LOE Subgroup: Pollutant-Water
Matrix: Water

Fraction:	Not Recorded
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 pre-2006 303(d)
Water Quality Objective/Criterion:	Unspecified
Objective/Criterion Reference:	Placeholder reference pre-2006 303(d)
Evaluation Guideline:	Unspecified
Guideline Reference:	Placeholder reference pre-2006 303(d)
Spatial Representation:	Unspecified
Temporal Representation:	Unspecified
Environmental Conditions:	Unspecified
QAPP Information:	Unspecified
QAPP Information Reference(s):	