# Fact Sheets Supporting Revision of the Section 303(d) List



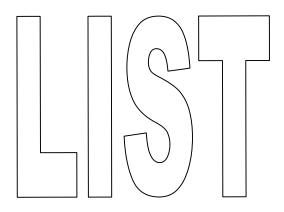
September 2005

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## Colorado River Basin Region (7)



Recommendations to place waters and pollutants on the section 303(d) List

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Water Segment: Alamo River

**Pollutant:** Chlorpyrifos

**Decision:** List

#### Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, the Alamo River is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances. Water toxicity has been documented in this water body and the pollutant is likely to cause or contribute to the toxic effect. Six 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Six of the 11 water samples exceeded the water quality objective and this exceeds 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 met.

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem. This pollutant should replace the existing listing for Pesticides.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: No individual chemical or combination of chemicals shall be

present in concentrations that adversely affect beneficial uses.

Evaluation Guideline: Department of Fish and Game guideline of 0.014 ug/L (Siepmann and

Finlayson, 2000).

Data Used to Assess Water

Quality:

Numeric data generated from 4 water samples collected as part of SWAMP and 7 samples collected by USGS. Six of these 11 samples exceeded the evaluation guideline (SWAMP, 2004; LeBlanc et al., 2004).

Spatial Representation: Seven stations were sampled, all situated along the Alamo River from the

international boundary with Mexico to the outlet (mouth) of the Alamo

River into the Salton Sea.

Temporal Representation: Four samples taken during the spring (May) and the fall (October) of

2002. Seven samples collected in April 2003, and the guideline was

exceeded in 5 of them.

Environmental Conditions: The Alamo River flows from Mexico through the Imperial Valley in the

Salton Sea. Most of the water flowing through it comes from agricultural

return flows.

Data Quality Assessment: SWAMP QAPP.

Water Segment: Alamo River

**Pollutant:** DDT

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, the Alamo River is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances. Tissue toxicity has been documented in this water body and the pollutant is likely to cause or contribute to the toxic effect. Eleven 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Eleven of the 11 tissue samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This addresses DDT and related pollutants.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: CTR: freshwater acute maximum = 1.1 ppb for 4,4'DDT and freshwater chronic maximum = 0.001 ppb for 4,4'DDT as a 4-day average.

Data Used to Assess Water Quality:

Samples were collected by the RWQCB on 6/21/2001 at 7 different stations. All samples were non-detects, with a detection limit of 0.1 ppb. Samples were also collected by the RWQCB on 4/15/2003 at 7 different stations. All samples were non-detects, with a detection limit of 0.018 ppb. Therefore, there were no exceedances of the total 14 samples (CRBRWQCB, 2004c).

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Spatial Representation: Samples were collected at the following Alamo River sampling stations:

AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-

GRB.

Temporal Representation: All samples were collected on 4/15/2003 and 6/21/2001.

Data Quality Assessment: Used RWQCB QA/QC in sample collection. Lab analysis was done by

North Coast Labs.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Colorado River Basin RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce

detrimental physiological responses in human, plant, animal, or aquatic

life.

Evaluation Guideline: 100 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Eleven out of 11 samples exceeded. A total of 6 filet composite samples and 5 individual samples of carp and channel catfish were collected. Carp were collected in 1993-94, 2000, and 2002. Channel catfish were collected in 1993-94, 1996-98, and 2002. The guideline was exceeded in all samples. This addresses DDT and related pollutants (TSMP, 2002).

Spatial Representation: Four stations along the Alamo River were sampled: upstream of Highway

78 crossing (Brawley), downstream of Sinclair Road (Calipatria), under the bridge at Highway 115 crossing (Holtville), and at the International Boundary to just downstream of Highway 98 (International Boundary).

Temporal Representation: Samples were collected annually 1993-94, 1996-98, 2000, and 2002.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Alamo River

**Pollutant:** Dieldrin

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, the Alamo River is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances. Tissue toxicity has been documented in this water body and the pollutant is likely to cause or contribute to the toxic effect. Ten 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Ten of the 11 tissue samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. The Alamo River from Holtville Drain to the outlet into the Salton Sea only.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater acute maximum = 0.24 ppb. USEPA: freshwater

chronic maximum = 0.056 ppb.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB on 4/15/2003 and 6/21/01 at 7 different stations on the Alamo River. Of the 14 samples, all samples were non-detects and did not exceed either of the criteria (CRBRWQCB,

2004c).

Spatial Representation: The Alamo River from Holtville Drain to the outlet into the Salton Sea

only. Samples were collected at the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-

GRB.

Temporal Representation: All samples were collected on 4/15/2003 and 6/21/01.

QA/QC Equivalent: Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Colorado River Basin RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce

free of toxic substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant, animal, or aquatic

life.

Evaluation Guideline: 2 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Ten out of 11 samples exceeded. A total of 5 filet composite and individual samples of carp and 6 filet composite and individual samples of channel catfish were collected. Carp were collected in 1993-94, 2000, and 2002. Channel catfish were collected in 1993-94, 1996-98, and 2002. The guideline was exceeded in all samples except a 2002 individual sample of

carp (TSMP, 2002).

Spatial Representation: The Alamo River from Holtville Drain to the outlet into the Salton Sea

only. Four stations along the Alamo River were sampled: upstream of Highway 78 crossing (Brawley), downstream of Sinclair Road

(Calipatria), under the bridge at Highway 115 crossing (Holtville), and at

the International Boundary to just downstream of Highway 98

(International Boundary). However, only the Alamo River @ Calipatria

should be placed on the list.

Temporal Representation: Samples were collected annually 1993-94, 1996-98, 2000, and 2002.

Toxic Substances Monitoring Program 1992-93 and 1994-95 Data Data Quality Assessment:

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Alamo River

**Pollutant:** Polychlorinated biphenyls

**Decision:** List

### Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 2.1, 3.6, and 3.9 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status while under section 3.9, a minimum of two lines of evidence are needed to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant toxicity and the pollutant is likely to cause or contribute to the toxic effect. The benthic community is impacted and may be impacted by this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 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. None of the 7 samples exceeded the USEPA freshwater chronic and acute criteria, however 11 of 11 tissue samples exceeded the OEHHA Screening Value and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The Alamo River from Central Drain to the outlet into the Salton Sea only should be placed on the list.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater acute total PCB's maximum = 2 ppb. USEPA:

freshwater chronic total PCB's maximum = 0.014 ppb.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB on 6/21/2001 at 7 different stations on the Alamo River. Of the 7 samples, all samples were non-detects and

did not exceed the criteria (CRBRWQCB, 2004c).

Spatial Representation: The Alamo River from Central Drain to the outlet into the Salton Sea

only. Samples were collected at the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-

GRB.

Temporal Representation: All samples were collected on 6/21/2001.

QA/QC Equivalent: Used RWQCB QA/QC in sample collection. Lab analysis was done by

North Coast Labs.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce

detrimental physiological responses in human, plant, animal, or aquatic

life.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value).

Data Used to Assess Water Eleven out of 11 samples exceeded. A total of 6 filet composite samples

Quality: and 5 individual samples of carp and channel catfish were collected. Carp

were collected in 1993-94, 2000, and 2002. Channel catfish were collected in 1993-94, 1996-98, and 2002. The guideline was exceeded in all samples

(TSMP, 2002).

Spatial Representation: The Alamo River from Central Drain to the outlet into the Salton Sea

only. Four stations along the Alamo River were sampled: upstream of

Highway 78 crossing (Brawley), downstream of Sinclair Road

(Calipatria), under the bridge at Highway 115 crossing (Holtville), and at

the International Boundary to just downstream of Highway 98

(International Boundary). Only the Alamo River from Central Drain to

Calipatria should be placed on the list.

Temporal Representation: Samples were collected annually 1993-94, 1996-98, 2000, and 2002.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Alamo River

**Pollutant:** Sedimentation/Siltation

**Decision:** List

Weight of Evidence: 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.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and 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.

SWRCB Staff Recommendation: After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use WA - Warm Freshwater Habitat

Information Used to Assess

Water Quality:

TMDL completed in 2002 (SWRCB, 2003).

Water Segment: Alamo River

**Pollutant:** Toxaphene

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, the Alamo River is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances. Tissue toxicity has been documented in this water body and the pollutant is likely to cause or contribute to the toxic effect. Eight 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Eight of the 11 tissue samples exceeded the water quality objective and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. The Alamo River from Central Drain to the outlet into the Salton Sea only should be placed on the list.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater acute maximum = 0.73 ppb. USEPA: freshwater

chronic maximum = 0.0002 ppb.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB on 4/15/2003 and 6/21/2001 at 7 different stations on the Alamo River. Of the 14 samples, all samples were non-detects and did not exceed either of the criteria (CRBRWQCB,

2004c).

Spatial Representation: The Alamo River from Central Drain to the outlet into the Salton Sea

only. Samples were collected at the following Alamo River sampling stations: AR-B (at the International Boundary), AR-D10 (Lower Alamo River drainshed, at Drop Structure #10), AR-D8 (Central Drain drainshed, at Drop Structure #8), AR-D6A (Holtville Main Drain drainshed, at Drop Structure #6A), AR-D6 (Rose Drain drainshed, at Drop Structure #6), AR-D3 (Central Alamo River drainshed, at Drop Structure #3), and at AR-

GRB.

Temporal Representation: All samples were collected on 4/15/2003 and 6/21/2001.

QA/QC Equivalent: Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and North Coast Labs. A Quality

Assurance Manual was also provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, PO - Hydroelectric Power Generation,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Colorado River Basin RWQCB Basin Plan: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or produce

detrimental physiological responses in human, plant, animal, or aquatic

life.

Evaluation Guideline: 30 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Eight out of 11 samples exceeded. A total of 6 filet composite samples and 5 individual filet samples of carp and channel catfish were collected. Carp were collected in 1993-94, 2000, and 2002. Channel catfish were collected in 1993-94, 1996-98, and 2002. The guideline was exceeded in all samples except 1993 carp and channel catfish and 2002 carp samples (TSMP,

2002).

Spatial Representation: The Alamo River from Central Drain to the outlet into the Salton Sea

only. Four stations along the Alamo River were sampled: upstream of

Highway 78 crossing (Brawley), downstream of Sinclair Road

(Calipatria), under the bridge at Highway 115 crossing (Holtville), and at

the International Boundary to just downstream of Highway 98

(International Boundary). Only the Alamo River from Central Drain to

Calipatria should be placed on the list.

Temporal Representation: Samples were collected annually 1993-94, 1996-98, 2000, and 2002.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: All American Canal

**Pollutant:** Specific Conductance

**Decision:** List

Weight of Evidence: 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. A large number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Sixty five of 71 samples exceeded the California Code of Regulations: Recommended Secondary Maximum Contaminant Level water quality objective and this exceeds 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.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Evaluation Guideline: California Code of Regulations: Recommended Secondary Maximum

Contaminant Level = 900 micromhos for water supplied to the public, because this may adversely affect the taste, odor or appearance of drinking water. Upper Secondary MCL = 1,600 micromhos and Short Term MCL =

2,200 micromhos.

Data Used to Assess Water Ouality:

Samples were collected by the Imperial Irrigation District (IID) once a year as part of the Annual Title 22 source water analysis from 1998 to 2003. Six of 6 samples were in exceedance of the recommended criterion (900 micromhos) and 0 of 6 were in exceedance of the upper or short term criteria. Samples were also collected monthly by the IID from 1998 to 2003. Fifty nine of 65 samples were in exceedance of the recommended criterion (900 micromhos) and 1 of 65 samples were in exceedance of the upper and short term MCLs (1000 mg/L). Six samples were below all criteria (CRBRWQCB, 2004a).

California Code of Regulations: Recommended Secondary Maximum Contaminant Level = 900 micromhos for water supplied to the public, because this may adversely affect the taste, odor or appearance of drinking water. Upper Secondary MCL = 1,600 umhos and Short Term MCL =  $\frac{1}{2}$ 

2,200 umhos.

Spatial Representation: Samples were collected from the All-American Canal at Drop # 4 and

Drop #1.

Temporal Representation: The 6 samples were collected once a year from 1998 through 2003.

Samples were collected in June in 1998-1999, October in 2000-2002, and November in 2003. The 65 samples were collected once a month from

6/21998 through 1/12/2004.

Data Quality Assessment: Imperial Irrigation District (IID) SOPs and Clinical Laboratory of San

Bernardino (CLSB) QA Manual.

Water Segment:	All American Canal

**Pollutant:** Sulfates

**Decision:** List

Weight of Evidence: 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. A large number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Fifty three of 66 samples exceeded the California Code of Regulations: Recommended Secondary Maximum Contaminant Level and this exceeds 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.

### **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Evaluation Guideline: California Code of Regulations: Recommended Secondary Maximum

Contaminant Level = 250 mg/L for water supplied to the public, because this may adversely affect the taste, odor or appearance of drinking water. Upper Secondary MCL = 500 mg/L and Short Term MCL = 600 mg/L.

Data Used to Assess Water

Quality:

Samples were collected monthly by the Imperial Irrigation District (IID) from the All-American Canal from 1998 through 2003. Fifty three of 66 samples were in exceedance of the recommended criterion (250 mg/L). None of the 66 samples were in exceedance of the upper and short term MCLs (500 and 600 mg/L respectively). Thirteen samples were below all

criteria (CRBRWQCB, 2004a).

Spatial Representation: Samples were collected from the All-American Canal below Drop # 1.

Temporal Representation: Samples were collected once a month from 6/21998 through 1/12/2004.

QA/QC Equivalent: Imperial Irrigation District (IID) SOPs.

Water Segment: All American Canal

**Pollutant:** Total Dissolved Solids

**Decision:** List

Weight of Evidence: 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. A large number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Seventy of 71 samples exceed the California Code of Regulations: Recommended Secondary Maximum Contaminant Level, and this exceeds 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.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Evaluation Guideline: California Code of Regulations: Recommended Secondary Maximum

Contaminant Level = 500 mg/L for water supplied to the public, because this may adversely affect the taste, odor or appearance of drinking water. Upper Secondary MCL = 1,000 mg/L and Short Term MCL = 1,500.

Data Used to Assess Water

Quality:

Samples were collected by the Imperial Irrigation District (IID) once a year as part of the Annual Title 22 source water analysis from 1998 through 2003. Six of 6 samples were in exceedance of the recommended criterion (500 mg/L) and 0 of 6 were in exceedance of the upper and short term MCLs. Samples were also collected monthly by the IID from 1998 through 2003. Sixty four of 65 samples were in exceedance of the recommended criterion (500 mg/L) and 1 of 65 were in exceedance of the upper and short term MCLs (1000 mg/L) (CRBRWQCB, 2004a).

Spatial Representation: Samples were collected from the All-American Canal at Drop # 4 and

Drop #1.

Temporal Representation: For the 6 samples: samples were collected once a year from 1998 through

2003. Samples were collected in June in 1998-1999, October in 2000-2002, and November in 2003. For the 65 samples: samples were collected

once a month from 6/2/1998 to 1/12/2004.

Data Quality Assessment: Imperial Irrigation District (IID) SOPs and Clinical Laboratory of San

Bernardino (CLSB) QA Manual.

Water Segment: Coachella Valley Storm Channel

**Pollutant:** Toxaphene

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Three of the 8 samples exceeded the NAS Guideline and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. The Coachella Valley Storm Channel from Lincoln Street to the outlet into the Salton Sea only should be placed on the list.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Sediment

Water Quality Objective/ Colorado River Basin RWQCB Basin Plan: No individual chemical or

Water Quality Criterion: combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 100 ng/g [NAS Guideline (whole fish)].

Data Used to Assess Water

Quality:

Three out of 8 samples exceeded. Four whole fish composite samples of red shiner, 3 whole fish composite samples of tilapia, and one composite sample of redbelly tilapia were collected. Red shiner were collected in 1992, 1995, and 2000-01. Tilapia were collected in 1996, 1999, and 2002. Redbelly tilapia were collected in 1995. The guideline was exceeded in

1996 tilapia and 2000-01 red shiner (TSMP, 2002).

Spatial Representation: The Coachella Valley Storm Channel from Lincoln Street to the outlet

into the Salton Sea only. One station located at foot of Lincoln Street was

sampled and was in exceedance.

Temporal Representation: Samples were collected annually in 1992, 1995-96, 1999, and 2000-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Colorado River (Imperial Reservoir to California Mexico Border)

**Pollutant:** Manganese

**Decision:** List

Weight of Evidence: 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. Two measurements exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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

3. Two of 2 samples exceeded the MCL and this exceeds 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.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a

pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: MU - Municipal & Domestic

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

Evaluation Guideline:

Department of Health Services MCL of 50 ug/L.

Data Used to Assess Water Quality:

Numeric data was generated from two samples (SWAMP, 2004). Both samples exceeded the MCL.

Spatial Representation:

One station sampled, situated close to the international boundary with Mexico. The sampled Station, Reservation Main Drain 4 (727CRRMD4) is part of the Lower Colorado River, Yuma Hydrologic Unit. This site is very close to the international boundary with Mexico. The reservation area is primary outlet for the subsurface drainage water and storm runoff water from lands in the Bard and Main Drain. Downstream of this area is Arizona jurisdiction and the management of the river water is by the International Boundary Water Commission (IBWC) and the US Bureau Reclamation (USBR).

Temporal Representation:

Two samples taken during the spring and fall of 2002.

Environmental Conditions:

The sampled Station, Reservation Main Drain 4 (727CRRMD4) is part of the Lower Colorado River, Yuma Hydrologic Unit. This site is very close to the international boundary with Mexico. The reservation area is primary outlet for the subsurface drainage water and storm runoff water from lands in the Bard and Main Drain. Downstream of this area is Arizona jurisdiction and the management of the river water is by the International Boundary Water Commission (IBWC) and the US Bureau Reclamation

(USBR).

Data Quality Assessment:

SWAMP QAPP.

Water Segment: Colorado River (Imperial Reservoir to California Mexico Border)

Pollutant: Selenium

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. Under section 3.5 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. A sufficient number of samples exceed the 2 ug/g OEHHA tissue screening value guideline for Selenium. Under section 3.5 of the Listing Policy any water body segment where tissue pollutant levels in organisms exceed a pollutant specific evaluation guideline shall be placed on the section 303(d) list.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Three of 5 samples exceeded the OEHHA tissue-screening value of Selenium and this exceeds 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.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: AG - Agricultural Supply, CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 2 ug/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Three out of 5 samples exceeded (TSMP, 2002). A total of 5 filet samples of largemouth bass were collected. Bass were collected in 1992, 1999, and

2001-02. Bass exceeded the guideline in 1999 and 2001-02.

Spatial Representation: Two stations were sampled: about 2 miles downstream of the Needles

Marina Resort and from Squaw Lake boat launch ramp to 1/4 mile north

of Senator Lake.

Temporal Representation: Samples were collected annually in 1992, 1999 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Imperial Valley Drains

**Pollutant:** DDT

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5, and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, Imperial Valley Drains is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Twelve 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Twelve of the 16 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This addresses DDT and related pollutants. The Barbara Worth Drain, Peach Drain, and Rice Drain only.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

### SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

*Matrix:* Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be presenting concentration that adversely affect beneficial uses.

Evaluation Guideline: 1000 ng/g [NAS Guideline (whole fish)].

Data Used to Assess Water Quality:

This addresses DDT and related pollutants. Two mosquitofish samples exceeded the guideline out of a total of 5 samples. A total of 5 whole fish composite samples of mosquitofish and sailfin molly were collected. Two mosquitofish samples were collected in 2000 and 3 sailfin molly samples were collected in 1992, and 2001-02. Sailfin molly samples did not exceed the guideline (TSMP, 2002).

Three out of 3 sailfin molly and mosquitofish samples were in exceedance of the guideline. A total of 3 whole fish composite samples were collected. One sailfin molly sample was collected in 1992 and 2 mosquitofish samples were collected in 1995-96.

Three out of 3 mosquitofish samples were in exceedance of the guideline. A total of 3 whole mosquitofish samples were collected in 2001-02.

Two out of 2 samples exceeded the guideline. One filet composite sample of carp was collected in 1999 and 1 individual filet sample of carp was collected in 2002.

Two out of 3 samples exceeded the guideline. A total of 3 filet composite samples, 2 channel catfish and 1 tilapia were collected. Channel catfish were collected in 1999 and 2002. Tilapia were collected in 2000. The 2 channel catfish samples exceeded, not the tilapia sample.

Spatial Representation:

The Barbara Worth Drain, Peach Drain, and Rice Drain only. For the 5 samples: 1 station located off Anderhold Road south of Highway S80 where drain comes alongside road. This information only applies to the Barbara Worth Drain area of the Imperial Valley Drains.

For the 3 samples collected in 1992, and 1995-96: 1 station located at HWY 115 crossing. This information only applies to the Peach Drain area of the Imperial Valley Drains.

For the 3 samples collected in 2002-02: 1 station located alongside headgate #101. This information only applies to the Rice Drain area of the Imperial Valley Drains.

For the 2 samples collected: 1 station located downstream of Meloland Road. This information only applies to the Central Drain area of the Imperial Valley Drains.

For the 3 samples collected in 1999, 2000 and 2002: 1 station location upstream from the last head gate on the drain. This information only applies to the Holtville Main Drain area of the Imperial Valley Drain.

Temporal Representation: Samples were collected in 1992, 1995-96, 1999, 2001 and 2000-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Imperial Valley Drains

**Pollutant:** Dieldrin

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5, and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Six 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Six of the 8 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Only one station at Barbara Worth Drain and one station at Fig Drain should be placed on the list.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

## **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 2 ng/g (OEHHA Screening Value) and 100 ng/g {NAS Guideline (whole

fish)}.

Data Used to Assess Water Quality:

Two out of 2 samples exceeded the OEHHA value. One filet composite sample (1999) and one individual sample (2002) of carp were collected. The guideline was exceeded in both samples. Two of 3 samples exceeded the NAS guideline. A total of 3 whole fish composite samples of sailfin molly and mosquitofish were collected. One sailfin molly sample was collected in 1992 and 2 mosquitofish samples were collected in 1995-96.

The NAS guideline was exceeded in the sailfin molly and in  $\boldsymbol{1}$ 

mosquitofish sample (TSMP, 2002).

Two out of 3 samples were in exceedance of the NAS guideline. A total of 3 whole fish composite samples of mosquitofish were collected in 2001-

02. The guideline was exceeded in 2001 and 2002 samples.

Spatial Representation: The Barbara Worth Drain and Fig Drain only. For the 2 carp samples: 1

station located downstream of Meloland Road. This information only applies to the Central Drain area of the Imperial Valley Drains. For the 3 samples collected in 1992 and 1995-96: 1 station located at HWY 115 crossing. This information only applies to the Peach Drain area of the Imperial Valley Drains. For the 3 samples collected in 2001-02: 1 station located alongside headgate #101. This information only applies to the Rice Drain area of the Imperial Valley Drains only one station at Barbara Worth Drain and one station at Fig Drain should be placed on the list.

Temporal Representation: Samples were collected 12/5/99 and 10/22/02; 1992 and 1995-96; and

2001-02.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Imperial Valley Drains

**Pollutant:** Endosulfan

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Two 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Two of the 3 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. One station located at the highway 115 crossing and Peach Drain was in exceedance.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

# **SWRCB Staff Recommendation:**

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

## **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 100 ng/g [NAS Guideline (whole fish)].

Data Used to Assess Water

Quality:

Two out of 3 samples exceeded the criteria. A total of 2 whole fish composite samples of mosquitofish and one of sailfin molly and were collected. Sailfin molly were collected in 1992 and the mosquitofish in 1995-96. The guideline was exceeded in sailfin molly and one of the two

mosquitofish samples (TSMP, 2002).

Spatial Representation: The Peach Drain only. One station located at the highway 115 crossing

and Peach Drain was in exceedance. This information only applies to the

Peach Drain area of the Imperial Valley Drains.

Temporal Representation: Samples were collected in 1992 and 1995-96.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

## Region 7

Water Segment: Imperial Valley Drains

**Pollutant:** Polychlorinated biphenyls

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Two of the 2 samples exceeded the OEHHA Screening Value and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. The Central Drain from Meloland Rd. to the outlet into the Alamo River only should be placed on the list.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Colorado River Basin RWQCB Basin Plan: No individual chemical or

Water Quality Criterion: combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Two out of 2 samples exceeded. One filet composite sample (1999) and one individual filet sample (2002) of carp were collected. The guideline

was exceeded in both samples (TSMP, 2002).

Spatial Representation: The Central Drain from Meloland Rd. to the outlet into the Alamo River

only. One station located downstream of Meloland Road was sampled. This information only applies to the Central Drain area of the Imperial Valley Drains. Only the Central Drain downstream of Meloland Road

station should be placed on the list.

Temporal Representation: Samples were collected 12/5/99 and 10/22/02.

Data Quality Assessment: Environmental Chemistry Quality Assurance and Data Report for the

Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: Imperial Valley Drains

**Pollutant:** Toxaphene

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5, and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Ten 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Ten of the 10 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. The Barbara Worth Drain, Peach Drain, and Rice Drain only should be listed.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

## **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 100 ng/g [NAS Guideline (whole fish)] and 30 ng/g (OEHHA Screening

Value).

Data Used to Assess Water Quality:

Five out of 5 samples exceeded the NAS guideline. A total of 5 whole fish composite samples of mosquitofish and sailfin molly were collected. Two mosquitofish samples were collected in 2000 and 3 sailfin molly samples were collected in 1992 and 2001-02. The guideline was exceeded in all samples (TSMP, 2002). Two out of 2 samples exceeded the OEHHA guideline. One filet composite sample (1999) and 1 individual filet sample (2002) of carp were collected. Both samples were in exceedance.

Three out of 3 samples exceeded the NAS guideline. A total of 3 whole fish composite samples of sailfin molly and mosquitofish were collected. One sailfin molly sample was collected in 1992 and 2 mosquitofish samples were collected in 1995-96. The guideline was exceeded in all samples.

Spatial Representation: The Barbara Worth Drain, Peach Drain, and Rice Drain only. For the 5

samples: 1 station located off Anderhold Road south of Highway S80 where drain comes alongside road. This information only applies to the Barbara Worth Drain area of the Imperial Valley Drains. For the 2 samples: 1 station located downstream of Meloland Road. This information only applies to the Central Drain area of the Imperial Valley

Drains. For the 3 samples: One station located at highway 115 crossing. This information only applies to the Peach Drain area of the Imperial

Valley Drains.

Temporal Representation: Samples were collected on 12-5-1999, 10/22/2002, in 1992, 1995-1996

and 2000-2002.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 Data Report.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: New River (Imperial)

**Pollutant:** Chlordane

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Five 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Five of the 13 tissue samples exceeded the water quality criteria, and this exceeds 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 met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

> Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR: freshwater acute maximum = 2.4 ppb and CTR: freshwater chronic

maximum = 0.0043 ppb as a 4-day average.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB at four locations on the New River in

2003. Of the 4 samples, all samples were non-detects with a detection limit of 0.025 ppb. Therefore, there were no exceedances (CRBRWQCB,

2004C).

Spatial Representation: Data were collected at four locations on the New River, from the

international boundary to the outlet to the Salton Sea.

Temporal Representation: Samples were collected on 4/17/2003.

*QA/QC Equivalent:* Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

> Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/

Colorado River Basin RWQCB Basin Plan: No individual chemical or Water Quality Criterion: combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 30 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Five out of 13 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 5 composite and individual samples

of carp, and one composite of tilapia were collected. Channel catfish were collected in 1992-93, 1995, 1997-98, and 2001-02. Carp were collected in 1993-94, 1997, and 1999. Tilapia were collected in 1996. Carp and channel catfish samples exceeded the guideline in 1992-94. A channel

catfish sample exceeded the guideline in 2002 (TSMP, 2002).

Spatial Representation: Two stations on the New River were sampled: at the gauging station about

one mile downstream of the Lack Road Bridge near Westmorland and

near the international boundary.

Temporal Representation: Samples were collected during the period of 1992-1999 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: New River (Imperial)

**Pollutant:** Chlorpyrifos

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in water. Two 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Two of the 9 water samples exceeded the water quality criteria, and this exceeds 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 met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: No individual chemical or combination of chemicals shall be

present in concentrations that adversely affect beneficial uses.

Evaluation Guideline: Guideline from the Department of Fish and Game of 0.014 ug/L used

(Siepmann and Finlayson, 2000).

Data Used to Assess Water

Quality:

Numeric data generated from 4 water samples from SWAMP and 5 water

samples taken by USGS. Two of nine samples exceeded the evaluation

guideline (SWAMP, 2004; LeBlanc, 2004).

Spatial Representation: Five stations were sampled. All were situated along the New River from

the international boundary with Mexico to the outlet (mouth) of New River in the Salton Sea. Exceedances were observed at the Evans Hewes

Highway and the Rice Drain stations.

Temporal Representation: Four samples were taken during the spring (May) and the fall (October) of

2002. No exceedances were observed. Of the five samples collected in

April 2003, two exceeded the evaluation guideline.

Environmental Conditions: The New River flows from Mexico through the Imperial Valley in the

Salton Sea. Most of the water flowing through it comes from agricultural

return flows.

Data Quality Assessment: SWAMP QAPP.

Water Segment: New River (Imperial)

**Pollutant:** DDT

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Eleven 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Eleven of the 13 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. This addresses DDT and related pollutants.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

> Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

CTR: freshwater acute maximum = 1.1 ppb for 4,4'DDT and freshwater

chronic maximum = 0.001 ppb for 4,4'DDT as a 4-day average.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB at four locations on the New River in 2003. None of the 4 samples exceeded the acute maximum, however 3 samples were below the detection limit (0.018 ppb) and 1 was above (0.13

ppb) the chronic maximum (CRBRWQCB, 2004c).

Data were collected at four locations on the New River, from the Spatial Representation:

international boundary to the outlet to the Salton Sea.

Temporal Representation: Samples were collected on 4/17/2003.

*QA/QC Equivalent:* Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

> Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/

Colorado River Basin RWQCB Basin Plan: No individual chemical or Water Quality Criterion: combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 100 ng/g (OEHHA Screening Value; Brodberg, 1999).

Data Used to Assess Water

Quality:

Eleven out of 13 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 5 filet composite and individual samples of carp, and one filet composite of tilapia were collected. Channel catfish were collected from 1992-99 and 2001-02. Carp were collected 1993-4, 1997, and 1999. Tilapia were collected in 1996. The guideline was exceeded in all samples except tilapia and a 1997 individual carp sample. This addresses DDT and related pollutants (TSMP, 2002).

Spatial Representation: Two stations, one station was located at the gauging station about one

mile downstream of the Lack Road Bridge near Westmorland and the

second station was located near the international boundary.

Temporal Representation: Samples were collected annually 1992-99 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: New River (Imperial)

**Pollutant:** Diazinon

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

One line of evidence is available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in water. Three 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Three of the 9 water samples exceeded the water quality criteria, and this exceeds 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 met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: Basin Plan: No individual chemical or combination of chemicals shall be

present in concentrations that adversely affect beneficial uses.

Evaluation Guideline: DFG Evaluation guideline of 0.10 ug/L (Siepmann and Finlayson, 2000).

Data Used to Assess Water

Quality:

Numeric data generated from 4 water samples from SWAMP and 5 water

samples from USGS. Three of 9 samples exceeded the evaluation

guideline (LeBlanc, et al. 2004; SWAMP, 2004).

Spatial Representation: Five stations were sampled. All were situated along the New River from

the international boundary with Mexico to the outlet (mouth) of New River in the Salton Sea. The boundary station had two exceedances and

the outlet had one exceedance.

Temporal Representation: Four samples were taken during the spring (May) and the fall (October) of

2002. Exceedances at both stations occurred in the fall sampling event. Five samples were collected in April 2003 and the diazinon concentration

exceeded the evaluation guideline in one sample.

Environmental Conditions: The New River flows from Mexico through the Imperial Valley in the

Salton Sea. Most of the water flowing through it comes from agricultural

return flows.

Data Quality Assessment: SWAMP QAPP.

Water Segment: New River (Imperial)

Pollutant: Dieldrin

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line

of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Ten 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Ten of the 13 tissue samples exceeded the water quality criteria, and this exceeds 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 met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

> Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:

USEPA: freshwater acute maximum = 0.24 ppb and freshwater chronic

maximum = 0.056 ppb as a 4-day average.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB at four locations on the New River in 2003. All samples were non-detects with a detection limit of 0.012 ppb.

Therefore, there were no exceedances (CRBRWQCB, 2004c).

Spatial Representation: Data were collected at four locations on the New River, from the

international boundary to the outlet to the Salton Sea.

Temporal Representation: Samples were collected on 4/17/2003.

Used RWQCB QA/QC in sample collection. Lab analysis was done by *QA/QC Equivalent:* 

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Tissue Matrix:

Water Quality Objective/

Colorado River Basin RWQCB Basin Plan: No individual chemical or Water Quality Criterion: combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 2 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Ten out of 13 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 5 filet composite and individual samples of carp, and one filet composite of tilapia were collected. Channel catfish were collected from 1992-99 and 2001-02. Carp were collected 1993-4, 1997, and 1999. Tilapia were collected in 1996. The guideline was exceeded in all samples except tilapia and 1994 and 1997 carp

samples (TSMP, 2002).

Spatial Representation: Two stations, one station located at the gauging station about one mile downstream of the Lack Road Bridge near Westmorland and the second

station located near the international boundary.

Temporal Representation: Samples were collected annually 1992-99 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

Water Segment: New River (Imperial)

**Pollutant:** Mercury

**Decision:** List

**Weight of Evidence:** T

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 and 3.5 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Two tissue samples exceeded the tissue guideline.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 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. Four of 113 water samples exceed the USEPA: freshwater chronic and acute guideline and this does not exceed the allowable frequency listed in Table 3.1, however 2 of 12 fish tissue samples exhibit toxicity exceeding the fish consumption standard, and these exceed the allowable frequency listed in Table 3.1 of the Listing Policy. The New River from the International Boundary to the USGS Station in Calexico only.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater chronic maximum = 0.77 ppb as a 4-day average and

freshwater acute maximum = 1.4 ppb.

Data Used to Assess Water Quality:

Samples were collected monthly by the RWQCB from June 1995 to December 2003. Of the 98 monthly samples, 2 were in exceedance of the chronic criteria and 1 was in exceedance of the acute criteria. Samples were also collected by the RWQCB at 3 locations from 6/11/1996 to 12/4/1996. None of these 6 samples were in exceedance. Samples were also collected by the RWQCB from 10/31/1999 to 11/6/1999. One of these 9 samples was in exceedance of the acute criteria (CRBRWQCB,

2004c).

Spatial Representation: The New River from the International Boundary to the USGS Station in

Calexico only. The 98 and 9 samples were collected on the New River at the International Boundary. The 6 samples were collected on the New River at the International Boundary at the International Drain, and at the

Puente Madero.

Temporal Representation: The 98 samples were collected monthly from June 1995 through

December 2003. The 6 samples were collected on 6 days from 6/11/1996 to 12/4/1996. The 9 samples were collected monthly from 10/31/1999 to

11/6/1999.

Environmental Conditions: For the 98 samples, temperature, pH, D.O., and conductivity were also

measured.

Data Quality Assessment: Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 0.3 ug/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Two out of 12 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 4 composite and individual samples of carp, and one composite of tilapia were collected. Channel catfish were collected in 1992-93, 1995, 1997-98, and 2001-02. Carp were collected in 1993-94 and 1997. Tilapia were collected in 1996. Two composite samples of carp in 1993-94 exceeded the guideline (TSMP, 2002).

Spatial Representation: The New River from the International Boundary to the USGS Station in

Calexico only. Two stations on the New River were samples: at the gauging station about one mile downstream of the Lack Road Bridge near

Westmorland and near the international boundary.

Temporal Representation: Samples were collected during the period of 1992-1998 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

# Region 7

Water Segment: New River (Imperial)

**Pollutant:** Pathogens

**Decision:** List

Weight of Evidence: 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.

One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination

was moved off the section 303(d) list during the 2002 listing cycle.

Based on the readily available data and 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.

**SWRCB Staff Recommendation:** 

After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan

has been approved.

**Lines of Evidence:** 

Line of Evidence Remedial Program in Place

Beneficial Use R1 - Water Contact Recreation, R2 - Non-Contact Recreation

Information Used to Assess

Water Quality:

TMDL completed in 2002 (SWRCB, 2003).

# Region 7

Water Segment: New River (Imperial)

**Pollutant:** Polychlorinated biphenyls

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.1 and 3.5 of the Listing Policy. Under section 3.1 and 3.5 a single line of evidence is necessary to assess listing status. Two lines of evidence are available in the administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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 sediment quality guideline used complies with the requirements of section 6.1.3 of the Policy.
- 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. None of 107 samples exceeded the USEPA: freshwater acute and chronic criteria. However, 10 of 13 samples exceeded the OEHHA Screening Value, and these do exceed the allowable frequency listed in Table 3.1 of the Listing Policy.
- 5. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

#### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater acute total PCBs maximum = 2 ppb and freshwater

chronic maximum as a 4-day average based on hardness.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB on 6/21/2001 at 9 different stations on the New River. All 9 samples were non-detects. There were no exceedances. Samples were also collected by the RWQCB from June 1995 to December 2003. None of these 98 samples were in exceedance

(CRBRWQCB, 2004c).

Spatial Representation: Samples were collected on the New River at the International Boundary.

Temporal Representation: The 9 samples were collected on 6/21/2001 and the 98 samples were

collected monthly from June 1995 to December 2003.

Environmental Conditions: For the 98 samples, temperature, pH, D.O., and conductivity were also

measured.

Data Quality Assessment: Used RWQCB QA/QC in sample collection. Lab analysis was done by

North Coast Labs.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion: Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely

affect beneficial uses.

Evaluation Guideline: 20 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Ten out of 13 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 5 filet composite and individual samples of carp, and one filet composite of tilapia were collected. Channel catfish were collected in 1992-93, 1995, 1997-98, and 2001-02. Carp were collected in 1993-94, 1997, and 1999. Tilapia were collected in 1996. A 1994 carp sample, a 1995 channel catfish sample, and the 1996 tilapia

sample had no detectable levels of PCB (TSMP, 2002).

Spatial Representation: Two stations on the New River were sampled: at the gauging station about

one mile downstream of the Lack Road Bridge near Westmorland and

near the international boundary.

Temporal Representation: Samples were collected during the period of 1992-1999 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

## Region 7

Water Segment: New River (Imperial)

**Pollutant:** Selenium

**Decision:** List

Weight of Evidence: 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. A large number of samples exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Fourteen of 117 samples exceeded the water quality criteria and this exceeds 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.

# SWRCB Staff Recommendation:

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards for the pollutant are exceeded.

### **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Water

Beneficial Use: FR - Freshwater Replenishment, IN - Industrial Service Supply, R1 -

Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater chronic maximum = 5 ppb as a 4-day average.

Data Used to Assess Water Quality:

Samples were collected by the RWQCB from June 1995 through December 2003. Of the 98 monthly samples, 8 were in exceedance of the chronic criteria and 2 were in exceedance of the USEPA: freshwater acute maximum. Four samples were also collected during the spring and fall of 2002 and numerical data was generated from them. All four samples exceeded the CTR: 5 ug/L criterion. Samples were also collected by the RWQCB at three locations from 6/11/96 through 12/4/96. None of these 6 samples were in exceedance of the USEPA: freshwater acute maximum. Samples were collected by the RWQCB from 10/31/99 through 11/6/99. None of these 9 samples were in exceedance of the USEPA: freshwater

acute maximum (CRBRWQCB, 2004c).

Spatial Representation: Samples were collected on the New River at the International Boundary.

The 6 samples were collected on the New River at the International Boundary, a the International Drain, and at Puente Madero. The 4 samples were samples at 2 stations, one at the International Boundary with Mexico and the other at the outlet (mouth) of the New River into the Salton Sea.

Temporal Representation: The 98 samples were collected monthly from June 1995 through

December 2003. The 6 samples were collected on 6 days from 6/11/1996 to 12/4/1996, the 9 samples were collected monthly from 10/31/1999 to 11/6/1999, and the 4 samples were collected during the spring and fall of

2002.

Environmental Conditions: For the 98 samples, temperature, pH, D.O., and conductivity were also

measured.

Data Quality Assessment: Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided. And the SWAMP QAPP was also used.

Water Segment: New River (Imperial)

**Pollutant:** Toxaphene

**Decision:** List

Weight of Evidence:

This pollutant is being considered for placement on the section 303(d) list under sections 3.5 and 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.

Currently, New River (Imperial) is listed for pesticides. It is not possible, in a general listing, to determine which specific pollutant is causing or contributing to water quality impacts. There is sufficient justification for removing the general listings for pesticides from the 303(d) list and replace these general listings with the specific pollutants when found to be exceeding.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.5 and 3.6, the site does exhibit exceedances in tissue. Seven 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 in favor of placing this water segment-pollutant combination on the section 303(d) 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. Seven of the 17 tissue samples exceeded the water quality criteria, and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Only the New River at Westmoreland station should be placed on the list.
- 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination be placed on the section 303(d) list because water quality standards are exceeded.

**Lines of Evidence:** 

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CM - Commercial and Sport Fishing (CA), IN - Industrial Service Supply,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion: USEPA: freshwater acute maximum = 0.73 ppb and chronic maximum =

0.0002 ppb as a 4-day average.

Data Used to Assess Water

Quality:

Data were collected by the RWQCB at 4 locations on the New River. All samples were below the detection limit (0.760 ppb), which is greater than the acute and chronic criteria. Therefore, the data cannot be assessed in

comparison to the chronic criteria (CRBRWQCB, 2004c).

Spatial Representation: Data were collected at four locations on the New River, from the

international boundary to the outlet to the Salton Sea.

Temporal Representation: Samples were collected on 4/17/2003.

Data Quality Assessment: Used RWQCB QA/QC in sample collection. Lab analysis was done by

E.S. Babcock & Sons laboratory and a Quality Assurance Manual was

provided.

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA), IN - Industrial Service Supply,

R1 - Water Contact Recreation, R2 - Non-Contact Recreation, RA - Rare & Endangered Species, WA - Warm Freshwater Habitat, WI - Wildlife

Habitat

Matrix: Tissue

Water Quality Objective/ Water Quality Criterion:

colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be presenting concentration that adversely

affect beneficial uses.

Evaluation Guideline: 30 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Seven out of 13 samples exceeded. A total of 7 filet composite and individual samples of channel catfish, 5 composite and individual samples of carp, and one composite of tilapia were collected. Channel catfish were collected in 1992-93, 1995, 1997-98, and 2001-02. Carp were collected in 1993-94, 1997, and 1999. Tilapia were collected in 1996. Channel catfish samples exceeded the guideline in 1993, 1995, 1997-98 2001-02. Carp exceeded in 1999. Only the New River at Westmoreland station met the

criteria in the Listing Policy (TSMP, 2002).

Spatial Representation: Two stations on the New River were sampled: at the gauging station about

one mile downstream of the Lack Road Bridge near Westmorland and near the international boundary. Only the New River at Westmoreland

station should be placed on the list.

Temporal Representation: Samples were collected during the period of 1992-1999 and 2001-02.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish

## Region 7

Water Segment: New River (Imperial)

**Pollutant:** Toxicity

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.6 of the Listing Policy. Under section 3.6 a single line of

evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 3.6 the site has significant sediment and water toxicity. While many pollutants are found in this water body it is uncertain which cause these effects.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Four of 4 samples exhibit sediment toxicity and 3 of 3 samples exhibit water toxicity. These 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.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded.

Lines of Evidence:

Numeric Line of Evidence Toxicity

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Sediment

Water Quality Objective/ Basin Plan: All waters shall be maintained free of toxic substances in Water Quality Criterion:

concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic

life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

*Ouality:* 

Toxicity testing data generated from 4 sediment samples. Four of these

samples were toxic (SWAMP, 2004).

Spatial Representation: Three stations were sampled, all were situated along the New River from

the international boundary with Mexico to the outlet (mouth) of New

River into the Salton Sea.

Temporal Representation: All samples were taken between the spring (May) and the fall (October) of

2002. Toxicity was detected during both seasons.

The New River flows from Mexico through the Imperial Valley in the Environmental Conditions:

Salton Sea. Most of the water flowing through it comes from agricultural

return flows.

Data Quality Assessment: SWAMP QAPP.

Numeric Line of Evidence **Toxicity** 

Beneficial Use: WA - Warm Freshwater Habitat

Matrix: Water

Water Quality Objective/

Water Quality Criterion:

Basin Plan: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental

physiological responses in human, plant, animal, or indigenous aquatic

life.

Evaluation Guideline: Significant toxicity as compared to control.

Data Used to Assess Water

Quality:

Toxicity testing data generated from 3 water samples. Three of these

samples were toxic (SWAMP, 2004).

Three stations were sampled, all were situated along the New River from Spatial Representation:

the international boundary with Mexico to the outlet (mouth) of New

River into the Salton Sea.

Temporal Representation: All samples were taken between the spring (May) and the fall (October) of 2002. Toxicity was detected during both seasons.

The New River flows from Mexico through the Imperial Valley in the Salton Sea. Most of the water flowing through it comes from agricultural Environmental Conditions:

return flows.

Data Quality Assessment: SWAMP QAPP.

# Region 7

Water Segment: Palo Verde Outfall Drain

**Pollutant:** DDT

**Decision:** List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list

under section 3.5 of the Listing Policy. One line of evidence is available in the

administrative record to assess this pollutant.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of 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. Four of the 11 samples exceeded the OEHHA Screening Value and this exceeds 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.

**SWRCB Staff Recommendation:** 

After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

## **Lines of Evidence:**

Numeric Line of Evidence Pollutant-Tissue

Beneficial Use: CM - Commercial and Sport Fishing (CA)

Matrix: Tissue

Water Quality Objective/ Colorado River Basin RWQCB combination of chemicals shall

Colorado River Basin RWQCB Basin Plan: No individual chemical or combination of chemicals shall be present in concentrations that adversely affect beneficial uses.

Evaluation Guideline: 100 ng/g (OEHHA Screening Value).

Data Used to Assess Water

Quality:

Four out of 11 samples exceeded. A total of 10 filet composite samples and one individual sample of largemouth bass, carp, channel catfish, and flathead catfish were collected. Carp were collected in 1992 and 1995. Channel catfish were collected in 1995. Flathead catfish were collected in 1992 and 2000. The 2000 sample of flathead was the lone individual sample. Largemouth bass were collected in 1995-96 and 1998-2002. The guideline was exceeded in the 1992 and 1995 carp samples, the 1992 fathead sample, and the 1995 channel catfish sample. Largemouth bass did

not exceed the guideline (TSMP, 2002).

Spatial Representation: One station located from the boat ramp off Clark Way in Palo Verde

downstream 3/4 of a mile was sampled.

Temporal Representation: Samples were collected annually 1992, 1995-96, 1998-2002.

Data Quality Assessment: Toxic Substances Monitoring Program 1992-93 and 1994-95 Data

Reports.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 1996-2000. Department of Fish

and Game.

Environmental Chemistry Quality Assurance and Data Report for the Toxic Substances Monitoring Program, 2001-2002. Department of Fish